

***United States Court of Appeals  
for the Second Circuit***



**BRIEF FOR  
APPELLEE**





# 76-7063

UNITED STATES COURT OF APPEALS  
SECOND CIRCUIT

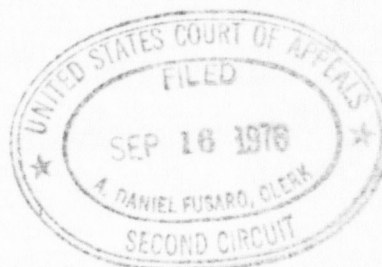
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DIGITRONICS CORP., NOW AMPEREX ELECTRONIC  
CORP., :

Plaintiff-Appellant-Cross Appellee, :

v. :

THE NEW YORK RACING ASSOCIATION, INC.,  
AUTOMATIC TOTALISATORS (U.S.A.) LTD.,  
AUTOMATIC TOTALISATORS LTD., and PREMIER  
EQUIPMENT PROPRIETARY LTD., :

Defendants-Appellees-Cross Appellants. :



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Appeal From the United States District Court  
For the Eastern District of New York  
(John F. Dooling, Jr., District Judge)

ANSWER BRIEF OF DEFENDANTS-APPELLEES  
and  
MAIN BRIEF OF DEFENDANTS-CROSS APPELLANTS

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ELECTRONIC CORP., :

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Defendants-Appellees-Appellants. :

Docket No.

76-7063  
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TYPOGRAPHICAL ERRORS IN BRIEF OF  
APPELLEES' CORRECTED IN SUBSTITUTED  
BRIEF REFERENCING DEFERRED JOINT APPENDIX

Pursuant to Federal Rule of Appellate Procedure 30(c),  
the following significant typographical errors in Appellees'  
Reply-Cross Brief (unreferenced to the deferred Joint Appendix)  
was corrected (with some insignificant errors) in the substituted  
Appellees' Reply-Cross Brief referenced to the deferred Joint  
Appendix.

Page 3, line 2, "was" has been changed to -were-

Page 4, line 2-3, "sematic" has been changed to -semantic-

Page 6, line 22, "had" has been changed to -have-

Page 7, line 14, "commerically" has been changed to -commercially-

Page 10, line 2, -the- has been inserted after involved

Page 11, line 7, "as" has been changed to -so-

Page 15, 1st of footnote "refered" has been changed to -referred-

Page 18, line 24, "doubt" has been changed to -doubts-

Page 20, last sentence has been positionally moved to avoid  
the confusion representation that it is part of quote.

Page 21, line 4, "patents" has been changed to -patent-

Page 21, line 18, "from" has been changed to -for-

Page 24, line 10, "68" has been changed to -67-

Page 24, line 16, "63" has been changed to -68-

Page 25, line 5, "system" has been changed to -systems-

Page 27, line 12 "capacity" has been changed to -capability-

Page 27, line 21, "124" has been changed to -122-

Page 28, line 4, "127" has been changed to -137-

Page 29, line 8, "a" has been changed to -the-

Page 34, line 27, "accomplished" has been changed to -accom-  
plishes-

Page 47, line 15, "in" has been removed after the word "while"

Page 55, line 26, -and- has been inserted after the word  
"establishments"

Page 56, line 23 "30" has been changed to -31-

Page 67, line 8, "354" has been changed to -334-

Page 68, line 3, Delete "-02"



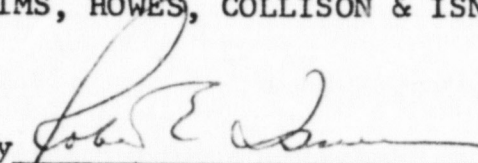
Page 70, line 10, "Dx-Cx" has been changed to -DxCU-

DATED: New York, New York

Respectfully,

NIMS, HOWES, COLLISON & ISNER

By



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ABBREVIATIONS

- |            |   |  |
|------------|---|--|
| F/F        | - | Finding of Fact (followed by Finding of Fact numbers)  |
| JAX        | - | Joint Appendix (followed by page number)   |
| PX         | - | Plaintiff's Exhibit (followed by exhibit number)   |
| DX         | - | Defendant's Exhibit (followed by exhibit letters(s))   |
| Pl.App.Br. | - | Plaintiff's Appeal Main Brief  |
| Op.        | - | Opinion (followed by page number of type-written opinion)  |
| EMPHASIS   | - | Emphasis throughout is defendants' except for citation of case names or where otherwise indicated. |

UNITED STATES COURT OF APPEALS  
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ANSWER BRIEF OF DEFENDANTS-APPELLEES  
and  
MAIN BRIEF OF DEFENDANTS-CROSS APPELLANTS

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I THE ISSUES PRESENTED FOR REVIEW

A - On the Appeal

Defendants-appellees, although of the view that the  
diffuse questions presented do not reach the stated grounds for  
invalidity found below, accept the same for the purposes of  
argument.



## B - On the Cross Appeal

The following question is presented for review:

Did the District Court err in failing to find the case to be "exceptional" because of the withholding of material facts relating to plaintiff's invalidating antecedent activities from the Patent Office?

## II STATEMENT OF CASE

The action was brought in December 1967 seeking an injunction<sup>1</sup> and damages against The New York Racing Association and others for alleged infringement of U.S. Patent No. 3,252,149 for DATA PROCESSING SYSTEM by the installation and use of the parimutuel totalisator equipment employed at the Aqueduct, Belmont Park and Saratoga race tracks. Defenses of non-infringement, patent invalidity on various grounds under 35 USC 102 and 103 and because of improper inventorship, were presented. A counterclaim for anti-trust law violation based on fraudulent patent procurement because of the withholding of material information as to plaintiff's own prior invalidating activities from the Patent Office (cf. Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp., 382 US 172 (1965)) coupled with requests that the patent be declared un-

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1 - Interestingly, waiver of injunctive relief came only after the trial had been concluded. cf. Pl.App.Br. 14, 85

enforceable because of unclean hands and that the case be declared "exceptional" under 35 USC 285 were also presented.

A twenty-five day trial was completed in late January, 1975. After extensive briefing, the Court rendered a comprehensive 216 page opinion, supplemented by explanatory appendices and by 52 formal findings and conclusions on September 16, 1975 holding the patent invalid on numerous grounds and non-infringed. On the counterclaim, the Court further found neither fraudulent patent procurement nor the case to be "exceptional" under 35 USC 285. A supplemental Memorandum and Order, disposing of certain requests for reconsideration, was rendered on January 13, 1976.

Only a portion of the comprehensive decision, which considered every factual issue involved, has been published - see 187 USPQ 602. Omitted therefrom are those fundamental sections (Sections II, III, V and the appendices) directed to the nature and scope of the specification and claims of the patent in suit.

### III PRELIMINARY STATEMENT AS TO THE NATURE OF THIS BRIEF

The nature and content of the decision clearly shows that this was a case decided on its facts. The claims in issue are of extreme breadth and are in the form of combinations of "means" plus a statement of function type. Viewed in broad aspect, plaintiff-appellant's position here, as it

was below, is to try to limit the claims to solid state electronic components and to thereby arguably establish some semantic differences between the "means" claims in issue and the prior art electromechanical totalisators and then, without ever considering the substantive nature and content of such asserted semantic differences in light of the state of the art, argue that the claimed subject matter is nonobvious under § 103 based solely upon the asserted presence of so called "secondary considerations" mentioned in Graham v. John Deere Co., 383 U.S. 1 (1966).

There was and is, however, more to the prior art than the electromechanical totalisators, not the least of which was the general state of the data processing art and the plaintiff's own activities both generally and also with the specific electronic totalisator subject matter. Determination of the existence of any such "differences" between the claims in issue and the prior art also requires an evaluation of the specific nature and content of the patent specification and specific claim terminology. Thus whether any "differences" exist at all and, if so, whether such are mere semantic distinctions or are differences of substance in light of the state of the art are purely factual issues that must be resolved by the trier of the facts. In this case and despite the esoteric nature of the subject matter, the bramble of unfamiliar term-



inology and the complexities presented by the inclusion of subject matter not here in issue in the patent specification, Judge Dooling, in a model of conscientious endeavor, devoted himself to obtaining a thorough factual understanding of the subject matter involved. In so doing, he determined the scope and content of the prior art, determined the nature and scope of the claims at issue and ascertained the "differences" - if any and whether semantic or real - between the "means" plus function claims and the prior art, all issues of fact, as conditions precedent to his determination of invalidity under both §§ 102 and 103.

In its brief, plaintiff-appellant totally avoids the "clearly erroneous" standard of Rule 52(a), F.R.C.P. with respect to the operative facts found below, and presents a wholly erroneous factual background oftentimes in direct contradiction to such operative facts. In conjunction therewith, plaintiff also mischaracterizes the actions taken by Judge Dooling below and avoids the many critical findings as to the nature and scope of the state of the art and the nature and scope of the "means" plus function claims in issue. Because of such action, it is now necessary to present an amplified statement of the relevant facts found by Judge Dooling on which his conclusions were based. Such factual statement will be followed by the answer to appellant's brief after

which the argument in support of the cross appeal will be advanced.

#### IV STATEMENT OF FACTS

In accord with the foregoing, and in order to provide this Court with a full appreciation and understanding of the determinative facts found below as well as what actually was done by Judge Dooling preparatory to reaching his conclusions of invalidity and non-infringement, we will preliminarily isolate and collate the operative facts. These operative facts concern - A) the state of the art including some of plaintiff's own activities relating to the development and commercial exploitation of the patented subject matter more than one year before the filing of the application for the patent in suit together with some of the other specific prior art relied upon by the defendants; B) the nature and scope of the specification and claims of the patent in suit and the nature of the "differences", if any, over the art; and C) miscellaneous activities of plaintiff relevant to the cross appeal including the circumstances attendant the preparation and filing of the application.

As will be apparent, the facts that hereinafter follow have been extracted directly from the opinion and findings of the lower Court.



A - As to the State of the Art

1 - Parimutuel Totalisators

Parimutuel betting is a system of wagering for multi-entrant events wherein wagers are accumulated in separate pools with betting odds and consequent payoffs being determined by the comparative totals in such pools (F/F 13; JAX 277 ). A parimutuel totalisator connotes a system for automatically totalling bets entered on key operated ticket issuing machines (TIMs) and such type systems for automatically performing the necessary accumulation of individual wagers and pool contents and for making the necessary calculations of odds, payoffs and the like were old in the art (F/F 15, 17; JAX 278).

As of 1961, the commercially employed totalisators at both Aqueduct and Roosevelt Raceway were American Totalisator Model 7J electromechanical systems (i.e. relay circuitry and the like) with certain electronic data processing adjuncts (F/F 24; JAX 281 ). As evidenced by Finding 25, the 1961 Aqueduct totalisator system embodied the following combination of functionally interrelated means:

- a) about 500 key operable ticket issuing machines of standardized construction,
- b) electromechanical aggregators for accumulating the amounts wagered on each entry in a race,

- c) electromechanical aggregators for accumulating the total amounts bet on all entries in a race,
- d) an electromechanical scanner for connecting ticket issuing machines wanting to place a bet to the aggregators,
- e) electrically operable display boards at various locations for the display of entry, odds and payoff information and the like,
- f) an "Automatic Observer" for checking accuracy of displayed information,
- g) an analog computer for calculating probable odds, and
- h) a solid state electronic digital price computer for calculating payoffs, all electrically interconnected to provide for information transfer between components thereof and periodic updating and display of necessary information. (JAX 282)

Such totalisator not only included solid state digital data processing equipment as an operating component (F/F 26; JAX 282 ), but also included provisions for automatically rejecting wagers on scratched horses with accompanying release of latched TIM switches and for checking input data for other errors (F/F 28; JAX 283 ); as well as incorporation of individual TIM memory devices (F/F 29; JAX 283).

This totalisator was one of the bases for invalidity found below and strangely has been ignored by plaintiff-appellant. For example, with respect to claim 20, the heart

of the patented system and the dominating claim (F/F 11; JAX 277 ), the Court stated (Op. 147; JAX 185 ):

So here, the system of Claim 20 represents a linear linkage of known devices each performing in sequence its familiar task. No discovery of any novel union of such means is present, but only a functionally adequate union of means in which each means is used to do what its nature and previous use suggest. The means combined in the system of Claim 20 neither embody nor obey any new law of cooperation.

and then later stated with respect to the lack of difference between the broadly stated means plus function claims in issue and the components and operation of the Aqueduct totalisator (Op. 200-201; JAX 238-239):

It does not duplicate Handley, but like Handley exhibits unions of means embracing, as of course, TIMs, individual runner and total aggregators, scratch horse wager rejection means usable to detect and reject an effort to aggregate wagers on two runners on the same scan, scanning means, and acknowledgement means. ... Again, as in the case of Handley, the Aqueduct totalizator illustrates the absence of any novelty in plaintiff's claimed unions of familiar means to perform their usual functions with their usual effect in a simply additive way.

## 2 - Genesis and Development of the Patented Subject Matter

As of 1959, Digitronics, a company experienced in data processing system design, had previously designed and constructed several similar data processing systems including



... a medical access and analysis system for the Schering Drug Company which involved the electronic scanning of a plurality of lever operable data input stations, the collection and storage of data obtained therefrom on magnetic tape units and the return of selectively generated signals to the data input stations (F/F 36; JAX 286)

as well as installations at various brokerage houses such as Bache & Co. and Merrill Lynch (Op. 21; JAX 59).

In early 1959, plaintiff Digitronics actively sought, as an item of "systems" business to enhance its income, a contract from Roosevelt Raceway to design and construct an electronic totalisator system to replace the electromechanical system then in use (F/F 36-38; JAX 286 ). Pursuant thereto and after receiving a description of the electromechanical system at Roosevelt, Digitronics commenced its design efforts (Op. 3, 139; JAX 41; 177 ). Such design efforts shortly resulted in a preliminary proposal and detailed engineering specification for an essentially solid state electronic totalisator system submitted to Roosevelt on May 11, 1959 (Op. 4; JAX 42 ). The nature and content of such specification was described by Judge Dooling in detail (Op. 5-11; JAX 43-49 ). This specification incorporated the then state of the art solid state components (cf. F/F 34; JAX 285 ) and none of the named "inventors" of the patent had any connection therewith (Op. 61; JAX 99).

During ensuing discussions, a further specification was prepared in November of 1959 for a prototype totalisator to "demonstrate how the actual system of ticket dispensing, computation and display would function for both daily double and regular operations." (Op. 11; JAX 49 ). Such specification was "roughly compatible with the May 11, 1959, outline of the preliminary proposal so far as the system envisioned was concerned." (Op. 11; JAX 49 ). A more detailed specification for the larger totalisator was prepared in February of 1960 to serve as an intended exhibit to a formal written agreement. This was a detailed specification conforming in all essential particulars to the ultimate patented subject matter (Op. 11-19; JAX 49-57 ).

All of these engineering specifications were prepared by or under the direction of one Eugene Leonard, an officer of Digitronics (F/F 36; JAX 286 ) and none of the named inventors of the patent in suit had any connection with any of them (Op. 61; JAX 99).

Because of the uncertainty as to Yonkers Raceway's possible participation in the venture and various other factors, negotiations dragged on (Op. 11, 12, 19-22; JAX 49, 50, 57-60 ). In May of 1960, Digitronics, pursuant to a hold harmless letter agreement with Roosevelt, started the construction

of the prototype totalisator (Op. 23-24; JAX 61-62).

In its report to stockholders in June of that year, plaintiff Digitronics described the prototype as "an electronic total-izator which should demonstrate, at greatly accelerated speeds and accuracy (and at sharply lower cost), the electronic recording and computing of bets ---" (Op. 24; JAX 62).

The prototype was completed and first demonstrated in about mid-November of that year (Op. 26-27; JAX 64-65 ). In late January of 1961, Digitronics and Westbury Electronic Corporation (a new corporation formed by Roosevelt to exploit the electronic totalisator subject matter) entered into a formal contract for the contemplated commercial exploitation of the subject matter. Shortly thereafter, "Roosevelt arranged to put \$150,000 into Westbury - \$99,000 of it as a loan and the balance as the price for 51% of the stock - the \$150,000 to be used to pay for the prototype." (Op. 28-29; JAX 66-67 ).

### 3 - The Sale and Use of The Prototype Totalisator

The January 1961 contract (DX-AP; JAX 889-898 ) between plaintiff Digitronics and Westbury Electronic (Roosevelt's alter ego), provided, inter alia:

2. Digitronics agrees to design, manufacture, sell and deliver to Westbury, and Westbury agrees to purchase from Digitronics, a Prototype, meeting the specifications set forth in Exhibit "A" hereto, and the First Totalizator meeting the specifications set forth in Exhibit "B" hereto (as so modified), all in accordance with the terms of the agreement.<sup>1</sup>

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1 - Ex A and B were the previously identified Leonard engineering specifications. (JAX 899-943)



Paragraph 3 put the cost of the prototype at \$150,000.00.

In March of 1961, Westbury was invoiced by Digitronics for the sale of the prototype totalisator and gave Digitronics a check for \$149,000.00 in payment thereof (Op. 30; JAX 68).<sup>1</sup>

"The prototype was repeatedly and successfully demonstrated more than a year before the patent application was filed" (Op. 64; JAX 102 ) to interested parties, both foreign and domestic, in an effort to secure order for tote systems (Op. 33-37, 55; JAX 71-75;93). Although such prototype was not an operative totalisator for actual race track installation because of limitations in the number of ticket issuing machines it was designed to accomodate, (and in this sense only was "commercially incompetent" cf. Op. 64-5; JAX 102-103 )<sup>2</sup>, it was far more than a mere model and, in fact, comprised a "full scale demonstrator"<sup>3</sup> (Op. 64; JAX 102 ) in the form of an operational unit that effectively included all of the means and performed all of the functions characteristically required of parimutuel totalisators (cf. F/F 49; JAX 293-294).

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1 - This apparently left Westbury with \$1,000 cash for operations.

2 - This is another out of context cliché used by plaintiff-appellant throughout its brief (See, e.g. Pl.App.Br. 1,7,14,25, 28,31,40).

3 - This is the device that is deprecatively and erroneously characterized as a "feasibility prototype" throughout plaintiff-appellant's brief (See, e.g. Pl.App.Br. 1,3,7,14,25,32,33,34,35,36,37, 38, 39,40,41,42,43,44,46,47,48).

The operatively complete nature of the prototype is graphically demonstrated by Finding 39 (JAX 287-288 ) which reads:

39. Exactly what was comprised in the Demonstrator or prototype is not certainly ascertainable and plaintiff is responsible for that circumstance. In the absence of the plaintiff's production of the evidence that must of necessity have been in its possession and which it has failed to produce defendants are entitled to a finding based on the remaining evidence that:

A. The "Demonstrator" or prototype electronic totalisator system included, prior to March 28, 1962:

- a) 16 simulated (non-ticket dispensing) ticket issuing machines and 3 regular (ticket dispensing) ticket issuing machines,
- b) electronic solid state aggregators for accumulating the amounts wagered on each entry in a race,
- c) electronic solid state aggregators for accumulating the total amounts bet on all entries in a race,
- d) an electronic scanner for sequentially connecting the ticket issuing machines wanting to place a bet to the aggregators,
- e) an electrically operable digital indicator display board for the display of entry, odds and pay off information and the like,
- f) digital solid state computing devices for calculating probable odds and pay offs,
- g) an electronic solid state memory for recording the bets made on each ticket issuing machine,

all electrically interconnected to provide for information transfer between components thereof and periodic updating and display of necessary information.

B. The ticket dispensing type of ticket issuing machines employed with the demonstrator electronic totalisator prior to March 28, 1962 included:



- (1) a plurality of selectively actuatable and latching transaction selection switches each associated with a different entry in a race for transmitting a selected transaction signal associated with the selected entry,
- (2) an acknowledgement signal responsive means for issuing a ticket having indicia recorded thereon that is related to a latched switch, and
- (3) a rejection signal responsive means for unlatching latched switches relating to a scratched entry.

A fuller appreciation of the anticipatory and invalidating character of this prototype totalisator can be obtained from a review of the July 1961 "presentation" used in conjunction with a demonstration for an Italian group (See Op. 34-36; JAX 72-74 ) and from the photographs and text of the Westbury sales brochure, which was, as the Court stated (Op. 56; JAX 94 ), " -- written around the prototype --." (see *infra* p. 16).

The anticipatory character and literal coincidence of the structure and mode of operation of the prototype with broad systems claims 20-22 in issue was unequivocally admitted by plaintiff's expert witness and patentee, Robert Weida (Op. 59, 61; JAX 97, 99 <sup>1</sup> ). The Court further found at Op. 62-63; JAX 100-101 :

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1 - This is the "unshrinking frankness" of Weida referred to by the Court, another of the out of context cliches used by plaintiff-appellant throughout its brief (See, e.g. Pl-App Br 8, 35 and 38).

The testimony of the named patentee Weida leaves no doubt that Claims 20-22 read on the prototype and that the attempt made to distinguish the claims made at the trial as not speaking to a plurality of TIMs (Tr. 1814-1823) is wholly unsubstantial.<sup>1</sup>

The anticipatory and hence invalidating character (§ 102(a), see *infra* pp. 32-37) of the prototype was expressly found by the Court below:

43. The Demonstrator or prototype included all of the subject matter recited in Claims 20, 21 and 22 (Tr. 1814-1823, 3728 et seq.); Claims 20-22 read on the Demonstrator-prototype;... (JAX 291)<sup>2</sup>

Here again, and as expressly found below:

40. None of the named inventors of the patent in suit made any conceptual contribution to any of the electronic totalisator subject matter incorporated in the "Demonstrator" electronic totalisator system....(JAX 288-289)

The fatal defect in inventorship and anticipatory invalidating character of the prototype as part of the prior art is further restated in Finding 49. (JAX 293-294).

Thus, however the prototype may be viewed, it was as expressly noted below, "...prior art of other inventors against the patent in suit." (Op. 63; JAX 101).

#### 4 - The Westbury Brochure

As an adjunct to the demonstrations of the prototype totalisator, an elaborate 14 page brochure (Dx-U; JAX 871-886 )

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1 - Tr. 1814-1823 (JAX 1184-1193)

2 - Tr. 1914-1823, 3728 et seq. (JAX 1184-1193, 1350 et seq.)

was printed and publicly distributed before the statutory bar date of March 23, 1962 as a part of the program of commercial exploitation of the subject matter (F/F 41; JAX 289-290). This brochure which was " -- written around the prototype --" (Op. 56; JAX 94 ), contained a very detailed description of the operative totalisator components and their functional and operational interrelationships and its nature described in the Opinion at Op. 40-46; JAX 78-84 ; F/F 41; 42; JAX 289-290; 290 . The literal coincidence of the detailed structure and mode of operation of the totalisator system described in the brochure with that of the prototype and with that of the actual First Totalisator on which the patent in suit was based is clearly demonstrated by Findings of Fact 41 and 42. (JAX 289-290 and 290).

With respect to this brochure, the Court specifically stated (Op. 65; JAX 103):

The printed and published brochure, Exhibit U, has a two-fold importance. First, within Section 102(b) it is beyond question a printed publication in this country; if it disclosed an invention, whether that of the patentees or that of Shaw and Kielsohn, that is final: it is either (or both) prior art against the patent (Section 102(a)), or a disabling printed publication (Section 102(b)). Second...

Here again, under any view of the matter the brochure and its contents forms a part of the prior art.



### 5 - Sale of the First Totalisator

Par. 2 of the January 1961 agreement expressly provided for the manufacture, sale and delivery of a full scale totalisator system, i.e. the "First Totalisator" (supra pp. 12-13). The Court expressly found (Op. 38-9; JAX 76-77):

Under date of August 15, 1961, Westbury formally authorized Digitronics to go ahead with the 100 window First Tote for \$800,000 or 130% of production costs, whichever was lower.<sup>1</sup>

In the ensuing months, construction of this First Tote went forward. The specification of the patent in suit was based upon this First Tote and there is a complete coincidence of subject matter therebetween (Op. 55-56, 123; JAX 93-94; 161).

The general similarity of the components and mode of operations of the actual electronic First Totalisator and systems that were previously designed and constructed by Digitronics for others was clearly revealed by the statement of Eric Haight (Digitronics chief executive officer) expressly quoted by the Court at Op. 55 (JAX 93):

" ... there is virtually nothing in our device which has not already been incorporated in other machines which we have installed for other purposes in such companies as..."  
-and he named a railway and three large industrial companies.

Such is entirely confirmatory of Finding 38 (JAX 286):

Leonard (of Digitronics) had no doubts or reservations as to Digitronics' ability to provide an electronic data processing system to perform the requisite totalisator function for parimutuel betting.

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1 - The statutory bar date was March 28, 1962.

## 6 - Still Other Prior Art Considered Below

Apart from the Handley U.S. Patent 2,479,681<sup>1</sup> which was expressly found to be of anticipatory invalidating character (infra pp. 32-37), additional evidence of the state of the art considered by the Court below is embodied in Finding 22, 23, 32-34, 38 and 41. The evidence of record that further related thereto included the discursive testimony of Highleyman (See, e.g. Tr. 2681-2699, 2752-2773)<sup>2</sup> and Weida (See, e.g. 1281-1301, 1348-1350),<sup>3</sup> the disclosure of the references cited by the Patent Office and reviewed below at Op. 124-127 (JAX 162-165) and the disclosures of the electronic totalisator prior art patents advanced by defendants and considered by the Court at Op. 201-03 (JAX 239-241). Even with respect to the more remote references in the latter group, the Court stated (Op. 202; JAX 240):

...all contribute something to the demonstration that plaintiff's patent presents, simply, one modest example of the wealth of suggested means of converting such data processing systems as racetrack parimutuel systems to the use of electronic components without presenting any patentable advance over the existing art or commercially available means of adaptation.

## 7 - Inventorship

As we have previously pointed out, none of the named inventors had any contact whatsoever with the Digitronics totalisator development through the design and construction of the pro-

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1- Dx -BQ, JAX 945-958

2- JAX 1260-1278, 1281-1303

3- JAX 1153-1173, 1174-1176

totype. Specifically, the issue of whether Weida made any arguable contribution was resolved against plaintiff as indicated by Finding 40(JAX 288-289 ):

40. None of the named inventors of the patent in suit made any conceptual contribution to any of the electronic totalisator subject matter incorporated in the "Demonstrator" electronic totalisator system. ... Such contributions would not constitute the patentee Weida a joint inventor within 35 U.S.C. 116, 256.

See also Opinion pages 26, 57-8, 60-1 (JAX 64, 95-96; 98-99) and Finding 49 (JAX 293-294) which states:



49. ...The patentees were not, however, in fact the inventors of the whole subject matter on which patent claims were sought in light of the extent of anticipation of certain claims of the patent by the demonstrator-prototype... (JAX 293-294)

B - The Nature and Scope of the Specification and Claims of the Patent in Suit and the Nature of Differences Over the Prior Art

U.S. Patent No. 3,252,149 for DATA PROCESSING SYSTEM issued on May 17, 1966 to Digitronics as assignee of five named inventors (F/F 7; JAX 276 ). As stated in the opening portion of the patent (ExP-1, col. 1, lines 11-16; JAX 306):

This invention pertains to data processing systems and more particularly to systems for processing data received from ticket issuing machines.

One of the most common of these systems is a parimutuel system employed for servicing transactions or wagers made by spectators at sporting events....

And as the Court expressly found (F/F 14; JAX 277-278 ):

Parimutuel "totalisators", whether manual, mechanical, electromechanical or electronic, are data processing systems.

Although the patent contains 33 claims, it was only at commencement of trial that plaintiff finally admitted that "data processor" claims 1-19, detailed "system" claims 28-30 and daily double system claims 31-33 were not infringed and

removed them from issue, leaving only the broad "system" claims 20-27 in the case (F/F 10; JAX 277).

"Data processor" claims 1-19 were directed to the use of duplexed data processing components and to details of multiple cross and error checking therebetween to obtain the necessary degree of reliability of operation (cf. Op. 85-86; JAX 123-124 ). Claims 31-33 were expressly directed to a "system for recording multi-entry transactions", i.e. - daily double bet processing (cf. Op. 87; JAX 125 ). The substantive content of such non-elected claims is only of interest because of plaintiff's improper reliance upon the purported existence and solution of the daily double problem<sup>1</sup> as indicia of invention and because much of the patent specification complexities are directly related thereto (See Op. 1, 83; JAX 39, 121).

Claims 20-27 are extremely broad claims directed to a data processing "system" for parimutuel bet totalisation. These claims are all combinational apparatus claims of the "means" plus a statement of function type (Op. 85; JAX 123 ). As recognized below, such type of claim is sanctioned by 35 USC 112 which also defines the criteria for de-

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1 - See Pl.App.Br. 5,6,7,8,12,13,20,28,49,52-55 and 58



termining the scope thereof, as follows (Op. 84; JAX 122):

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

The determination of claim meaning and scope with respect to the patent specification and in the light of the state of the art, which is also a primary requirement for the resolution of the § 103 issues under Graham v. John Deere Co., 383 U.S. 1 (1966) - see infra pp. 46-51, 55, 58-59; formed a major portion of Judge Dooling's task. Considering the complicated nature of the subject matter, the esoteric terminology employed and the confusing complexities of this particular patent specification, Judge Dooling's discharge of his responsibilities, as evidenced by the opinion herein, is truly a model of conscientious endeavor. While this Court does not have to delve into the details of the logic circuitry as did Judge Dooling, a full appreciation and understanding of what was done and what was found by the District Court is a necessity to the resolution of this appeal.

At the very initiation of his consideration of the patent, the Court aptly characterized the patent as a "bramble

of unfamiliar terminology" and expressly noted that the 25 day trial "made possible a reliably simple explanation of the teaching of the patent against the background of the prior art" (Op. 68, 1-2; JAX 106,39-40).<sup>1</sup>

More specifically, the patent specification and drawings employ data processing or logical symbolism and terminology (Op. 77; JAX 115 ) and do not delineate or describe any particular electrical circuitry or components thereof.

Thus after describing the development chronology in Section I (Op. 1-67; JAX 39-105 ), Judge Dooling initially describes, in Section II of his opinion (68-85; JAX 106-123 ) some of the basic concepts underlying state of the art digital data processing operations and some of the basic logical building blocks, terminology and symbolism that are conventionally employed, such as "and", "or", "flip flop" and "delay" elements (Op. 68-77; JAX 106-115 ). Also described is the nature and mode of operation of the then conventional "magnetic core" type memory units (Op. 78-82; JAX 116-120 ) and modes of signal identification and transmission (Op. 82-85; JAX 120-123 ).

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1 - Plaintiff-appellant studiously avoids this express introductory statement of the Court in asserting that he found the patent invalid on its face (See, e.g. Pl.App.Br. 13, 15, 21, 25-27, 56-58 and 63).

The lack of any specifically disclosed electrical circuitry or components (other than core memory units) in the specification is of paramount significance. In that portion of the patent specification entitled "Description of the Elements of the Systems" (ExP-1, col. 11, line 40 et seq.; JAX 311 ), the various esoterically titled components such as buffers, scan counters, scanners, inequality testers, updaters, storage address generators, decoders and the like are only identified as "logical elements" satisfying particular Boolean equations. Illustratively included therein are repeated references to standard textbooks, principally Richards, Arithmetic Operations in Digital Computers, for disclosure of appropriate electrical circuit elements by which the logical elements may be implemented (cf. ExP-1, col. 12, lines 2-15; col. 13, lines 53-56; col. 15, line 26; JAX 311; 312; 313).

This is the only disclosure of circuitry and circuit elements, other than core memory utilization, and necessarily embodies no more than conventional usage of the then state of the art knowledge.

Of no little importance, and as specifically found below, is the fact that the principal text reference (e.g. Richards, Arithmetic Operations in Digital Computers)<sup>1</sup> repeatedly relied upon to identify conventionally available cir-

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1 - See Exhibits K, L, M, N (JAX 846-865).



cuitry and circuit elements by which the disclosed logical element subject matter may be implemented -- "conducts much of the discussion in terms of logical diagrams without reference to the particular means of performing the logical functions, and that he explains their use with either solid state diodes, or vacuum tubes, or electromechanical relays" (Op. 77; JAX 115        ). So also at Op. 123 (JAX 161        ) where the Court states as to the specification:

Nevertheless, the language, except in odd places, does not specify or necessarily imply the use of electronic components, and its insistence throughout on generalized expressions that could apply indifferently to electromechanical, vacuum and gas tube, or solid state circuitry precludes a reading of the specification as limited to and selectively invoking specifically electronic means and, within that classification, solid-state electronic means.

Fact Finding 44 stands unchallenged and reads as follows: (JAX 291-292)

Nothing in the specification or claims of the patent limits the claimed inventions to solid state electronic data processing; in light of the explicit omission of reference to electronic means and components (except in the reference to electronic scanning (Column 10 lines 72 et seq.); contrast Weida patents Nos. 2,848,532 and 3,042,902, Exhibits P and Q, prosecuted by the same attorney of record as the present patent) the claims cannot be read as solid state digital electronic data processing system claims, but must be interpreted as intended to and in form claiming any means embraced in the disclosure of the specification, including any electromechanical or mechanical means that were adequate to function as the indicated means and within the designation of the means language.

While the above was determinative of one purely factual aspect of the scope of the claimed "means" terminology - i.e., the particular type or types of electrical circuitry and circuit elements that might be involved; - a further problem existed in factually ascertaining the more general nature of the various data processing components that were delineated by the "means" plus function terminology.

Such was not an easy task for, as the Court below noted, "The specification of the patent is not easy to read, the figures are not communicative, and the field of the patent at first blush appears complex" (Op. 1; JAX 39 ) and that "the reading is complicated by the fact that the specification is written around the daily double capability of the system and its use substantially throughout of duplicate components and duplicate processing of the critical signals, neither of which aspects of the patent is involved in claims 20 through 27, the only claims here involved"(Op. 83; JAX 121) .

To achieve such ends, the Court exhaustively reviewed the disclosure of the specification in Section III (Op. 85-122; JAX 123-160 ) and even went so far as to prepare simplified sketches of the drawings (Annexes A-E) to eliminate therefrom the duplicative data processing components and all elements not germane to the particular claimed subject matter

at issue (Op. 83-85; JAX 121-123 ). The Court also reviewed the essentially perfunctory nature of the Patent Office prosecution and the nature of the references cited therein as evidenced by Section IV of the opinion (Op. 123-137; JAX 161-175 ) prior to specifically considering the nature and scope of each of the claims 20-27 at issue.

As evidenced by Finding 23, which reads as follows: (JAX 281)

23. The demands of a racetrack parimutuel system on data processing resources are modest: the arithmetic calculations required are rudimentary; the range of input data is narrow, and the data are simple and easily translated into binary terms; no elaborated long-term memory is requisite; programming is simple and direct, and much of it is reducible to permanent wiring of system components; pre-existing electromechanical circuitry readily supplies patterns which are in considerable part directly adaptable to solid state electronic data processing; the service demands on data processing systems of a racetrack parimutuel system present no identifiable difference of technical significance from those of other multiple input situations.

and by the following extracts from Section V<sup>2</sup> of the Opinion, - which is prefatory to the detailed and individual claim consideration of Section VI,<sup>3</sup> - the determination of the nature and scope of claims 20-27 were squarely based upon the nature of the disclosure of the specification and upon the basic nature of the totalisator operations "against the background of the  
prior art."<sup>1</sup>

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1 - Op. 68 ; JAX 106

2 - JAX 175-178

3 - JAX 178-219



The nature of the claims of the patent and, indeed, the patent as a whole are best understood in terms of the nature of the task to which the device of the patent was addressed. (Op. 137; JAX 175). . .

The system of the patent is primarily an aggregator system, aggregating the number of wagers placed on each entry in the race in two separate aggregators, the registers MEMA which aggregate the wagers on each horse in the race in each of the three pools (i.e., win, place, and show) and the TIM aggregator (the TIM memory WM), where the number of wagers made at each TIM on each horse in each of the three pools is separately aggregated. These are kept up to date, as each additional wager is signalled, by the updater, which, in each case, is a unit adder; that is, it adds one. The task, then, is a very simple one, and it is the same for every race every day .... The computer, too, has, as computer tasks go, a very simple job, and that is to draw from the aggregator MEMA the total wagers in each of the three pools and the total wagers on each horse in each pool, to use these sums to compute the odds on each horse in each pool and the total wagered in each pool, and then to feed to the output display boards the result of the odds computation on each horse in each pool and the total bet. ... Such a task is without any inherent difficulty, and it involved no great degree of solid-state electronic data processing art. The whole Raceway task, when outlined to Mr. Leonard by Mr. Lynch at the very beginning of the project in 1959, seems not to have been thought to present any particular problem. There was no delay in Mr. Leonard's presenting confidently a system that would deal with the matter effectively. (Op. 137-9; JAX 175-177 ; cf. F/F 38; JAX 286 ).

and at p. 140 (JAX 178 -- ) after reference to the simplified sketch of Annex A:

As the patent makes plain, the various devices used are all familiar ones. They involve very detailed circuitry painstakingly worked out, but there is no novel circuitry involved as is clear from the face of the patent and from the trial evidence.

In Section VI (Op. 140-181; JAX 178-219 ), Judge Dooling exhaustively analyzed and provided a detailed review of the nature and scope of each of the claims in issue in light of a) the specific logic circuitry disclosed in the specification; b) the state of the art including the requisite and known totalisator functions to be performed and c) on the assumption that the then current state of the art electrical components, i.e. electronic components would be employed -- i.e. on plaintiff's own grounds.

In so doing, he cut through the complexities of the specification and pierced the veil of esoteric terminology employed therein, i.e. "aggregator address transmitter, "storage address generator", "step pulse generator", "buffer", "entry register", "scan counter", "decoder", etc. (cf. Op. 141; JAX 179 ) and stated as to the express language of claim 20 - concededly the "heart" of the patented totalisator system and the "dominating" claim (F/F 11; JAX 277):

Cutting through, the system of Claim 20, then, comprises a set of commercially available fairly standardized TIMs, appropriate electronic linkage between the TIMs, an aggregator, a unit adder, and an acknowledgement-signal amplifier

between the unit adder and the TIM so that aggregating the wager effects an electro-mechanical release of the betting ticket.

The claim is strikingly barren of any genuine specification of means. Only by reference to Claims 21 and 22 does it become clear that the "calculation" of Claim 20 element (C) is the aggregation of the wagers and storage of them through the updater UAA and memory MEMA. The claim relates only to the simple operation of depressing one wager key on a TIM with the effect of actuating the updater to increment the register MEMA by the number one and effect, by return signal, an automatic release of a receipt of betting ticket. The detail of the circuitry, outlined in Exhibits 11, 11A by the heavy lines, and described at Tr. 170-179, 185-208, evinces no novelty. Each component<sup>1</sup> is, as the specification makes plain, a familiar of the prior art (existing in various forms), and it performs its familiar role in a familiar way. The undertaking of the combination is an easy one, aggregating wagers without losing track of the horse on which and the pool in which the wager was placed, or the TIM at which the wager was placed.

The obviousness of the system is most readily seen in Annex A. The combination of means presented by Claim 20 is an utterly simple aggregator of punched-in data. Every component is in its predictable place and does its - in this field - simple office simply. (Op. 141- 43; JAX 179-181).

The Court then discussed the rudimentary and conventional character of the disclosed logical circuits involved

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1 - i.e., As delineated by the "means" plus function clauses.



and concluded by stating (Op. 145-46; JAX 183-184 ):

If Claim 20 is narrowed to the specific figures and text of the patent it is necessarily a very narrow claim indeed, but in language it is extremely broad. If read in the first way ... If read broadly in obedience to its literal language, it inures as a statement of aims rather than as a workable statement of a union of identifiable means. But by either reading no unobviously new union of means is taught.

and after appropriately citing Pickering v. McCullough, 1881, 104 US 310, 318 and Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 1969, 396 US 57, 60-61,<sup>1</sup> concluded by stating:

So here, the system of Claim 20 represents a linear linkage of known devices each performing in sequence its familiar task. No discovery of any novel union of such means is present, but only a functionally adequate union of means in which each means is used to do what its nature and previous use suggest. The means combined in the system of Claim 20 neither embody nor obey any new law of co-operation. (Op. 147; JAX 185).

In the next section of the opinion the literal coincidence of such claim terminology with a specific prior art patent reference for an electromechanical totalisator such as Handley (US Pat. 2,479,681)<sup>2</sup> - which thus constituted a clear

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1 - This portion of the decision expressly relates to the Graham v. John Deere Co. case, among others.

2 - Dx BQ JAX 945-958

invalidating anticipation - was also expressly noted (Op. 194; JAX 232 ):

That Handley is essentially electromechanical and not an electronic digital processing system does not distinguish it. Plaintiff's patent is not on a new, unobviously new means of substituting EDP components in familiar racetrack circuitry. It does not limit its claim to EDP components. The patent claims in issue are systems claims, each consisting in a combination of inclusively indicated means that consist in reality of circuitry connecting conventional elements for conventional uses, the whole enacting an old scenario. The union of means claimed by Claim 20 is an unimaginative joining of the basic means of any aggregator of TIM data, means of picking up the wagers (or sales, or whatever the machines handle), adding them by classes (or performing some other calculation on them), and acknowledging (confirming) to the source that the calculation has been made. Handley does these things.

Dependent claims 21 and 22 were next specifically considered, and, after noting that such did no more than particularize claim 20 in that they specified magnetic core memory utilization as part of the aggregators, were properly deemed to add "nothing" insofar as inventive contribution was concerned. (Op. 147-49; JAX 185-187 ).

Claim 23, the "scratch" subsystem, was next considered and found to comprise -

...conventional TIMs, a switch device to permit the emission of a set of steady scratch signals, a conventional comparator to match scratch signals with signals for attempted wagers on scratched

entries, rejection signal circuitry and the acknowledgement circuitry of Claim 20(C). The idea of the system is simple; the simplicity is not that of discovered but of obvious simplicity, and the means invoked are an obvious dictate of the simple end sought.

The claim does not in reality go beyond the obvious use of a comparator as a guard against taking wagers on scratches. (Op. 150-51; JAX 188-189).

As noted earlier, such prevention of issuance of a ticket on a scratched horse was characteristic of the electro-mechanical totalisators (supra pp. 7-8 ; F/F 28; JAX 283 ). Claim 23 was also found to read on the Handley patent (Op. 196; JAX 234 ).

Claim 24 related to scanning of the TIMs and received the same painstaking analysis (Op. 153-58; JAX 191-196 ).

The Court concluded with respect thereto:

Again; the subsystem claimed combines conventional components to perform a familiar assignment in a conventional way. (Op. 157; JAX 195 ).

and

No discovery is present here. Detail abounds, but ingenious novelty is not present. It is pedestrian circuitry that accomplishes its very simple goal of furnishing a pulse that tracks through a system (with the functions of which scanning is not concerned) and, on circuit completion to origin, ticks the binary counter on to the emission of its next count signal. (Op. 159; JAX 197).



Dependent claim 25 thereon was similarly reviewed  
(Op. 159-60; JAX 197-198 ) with the Court stating:

Claim 25 adds nothing. It simply covers the other alternative - that a wager has been made - and it requires that a stepping control exist so that the scan does not step to the next TIM before the bet has been processed. (Op. 159; JAX 197).

and

Claim 25, the rest of Claim 24 in reality, is equally obvious, the same detailed and uninspired circuitry doing the routine routinely. Neither Claim presents anything except a rudimentary scan system, nothing approaching the versatility of Schrimpf, No. 3,029,414 (Exhibit 3A), passed over so lightly in the office action. It is not possible to conceive that Claims 24 and 25 could have survived the prosecution if the Patent Office had examined the claims with the required particularity. (Op. 160; JAX 198).

The subject matter of these claims were likewise found in Handley. (Op. 197; JAX 235) .

As to claims 26 and 27, which were directed to error checking, the Court, again after detailed analysis (Op. 161-66; JAX 199-204 ), stated:

As in the case of Claims 20 through 25 no discovery is disclosed, only painstaking articulation of familiar means to perform simple error checks through use of circuitry suggested by the nature of the tasks to be performed and the nature of the conventionally appropriate components that the tasks themselves pointed out as suited for the service. (Op. 166; JAX 204) .

Such error checks were a characteristic of the prior

art totalisators (supra pp. 7-8, 34 ; F/F 28; JAX 283 ) and the subject matter was also found to be in Handley (Op. 198-99; JAX 236-237 ).

Simply stated, the nature of the recited combinations and the express terminology of claims 20-27 places plaintiff on the horns of a dilemma. Literally construed, the means plus function terminology does not differentiate, either as to the combinational structure or the functions performed thereby, over the prior art totalisators such as Handley and the 1961 Aqueduct unit. Narrowly construed, and if restricted to the usage of solid state electronic circuit components, they are likewise definitive of nothing new since state of the art conventionality was the cornerstone of the disclosure through the sole identification of circuit components by reference to standard texts and by the then state of knowledge in the data processing field. Such is rendered apparent by the Court's concluding comment as to Handley (Op. 199-200; JAX 237-238):

The detailed consideration of Handley demonstrates the overall absence of patentable novelty in the patent in suit. It brings out sharply the extent to which familiar circuits have long handled familiar tasks, and that the plaintiff's patentees brought no new discovery to the task but only a routine choice of familiar but newer means to replace the older ones of Handley in the same union of means. The union embraced in each claim Handley shows to be itself old, the asserted differences between Handley and the plaintiff's patent that plaintiff relies on, emphasizing differences in the means and not in the combinations or unions

of means that, broadly, were equivalents, underline the want of novelty in the union of means - the combinations, on the patentable novelty of which validity absolutely depends.

and also as to the 1961 Aqueduct unit where, other than with respect to the use of the core memory units as the aggregators, the Court stated (Op. 200-201; JAX 238-239):

The Aqueduct Totalizator System of 1960-1961, discussed by the witness Fosse in detail (see particularly, Tr. 1939-1954) and summarily by the witness Highleyman (Tr. 2959-2965), is most easily seen in Exhibits X and BT, and it is illustrated in terms of typical operating subsystems and components in Exhibit AA. It does not duplicate Handley, but like Handley exhibits unions of means embracing, as of course, TIMs, individual runner and total aggregators, scratch horse wager rejection means usable to detect and reject an effort to aggregate wagers on two runners on the same scan, scanning means, and acknowledgement means. The Aqueduct totalizator did not have means to record the number of bets placed at each TIM and, thus, could not be said to respond to Claim 22. Like Handley, it does not exhibit claim elements 21 (C) and 21 (E), but the point of claim elements 21 (A) through 21 (E) is simply to state "aggregator means," and such means the Aqueduct totalizator possessed, as did Handley. Again, as in the case of Handley, the Aqueduct totalizator illustrates the absence of any novelty in plaintiff's claimed unions of familiar means to perform their usual functions with their usual effect in a simple additive way.<sup>1</sup>

In conjunction with the nature and scope of the claimed subject matter at issue, it should be further noted that the Court expressly treated and factually disposed of plaintiff's specific contentions as to the limitation of the claims to solid state (electronic data processing components); as to the

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1 - Tr. 1939-1954 (JAX 1195-1210); Tr. 2959-2965 (JAX 1304-1310); DxX (JAX 887); ExBT (JAX 959); ExAA (JAX 888)



presence of a synergistic result and the like. (Op. 169 et seq.; JAX 207 et seq). In disposing of the electronic limitation argument (Op. 169-70; JAX 207-208 ), the Court stated (Op. 170; JAX 208):

The last point is valueless. Hybrid systems exist. Deciding how many components to convert to EDP is a matter of informed choice.

See also Op. 173; JAX 211

As to the asserted synergism, the Court exhaustively considered the asserted factual basis therefor (Op. 170-81; JAX 208-219 ) and concluded as follows (Op. 175; JAX 213 ): "The claimed "synergistic" effect is not present."

and at Op. 179-181 (JAX 217-219):

The assertion of synergistic effect evaporates with the observation that the decoder DEC supplies the TIM number to the storage address generator SAGA for inclusion in the address of the pending selected transaction signal which is then stored in two memories; it is stored in MEMA by entry and TIM, and it is stored in the dubiously useful WM as a register of the total number (unsorted) of wagers at each TIM. No unobviously useful economy exists in employing scan counter SKA as such a signal generation means as it may be to feed both the scanner (decoder) SCA and the decoder DEC. If a second memory was to be used to store some of the same data being stored in MEMA, obviously it would be done by the same means at the same take-off point. That was the role of the DEC reading of the signal from SKA. A special ingenuity of indirection would be required to do it any other way. . . .

The TIM memory WM does nothing that a mechanical counter on the TIM could not do as well, and, moreover, the TIMs in use at the time in New York were required to and did maintain a separate print out of all transactions, an electromechanical or electrical and mechanical operation of familiar sort (Tr. 1841, 2264-2269). If there was a use for the TIM memory data, reading them out of the more elaborate data required to aggregate and update the wagers in the registers of the memory MEMA was another way to do it. The allegedly "synergistic" effect is, then, the common attribute of all EDP systems - that they are energized from a common source and are ordered in real time by a common step signal.<sup>1</sup>

As to the concluding language of claim 20, i.e. -  
 "only if the transaction is correct" - the Court held (Op. 174; JAX 212):

Apart from the skew given to Claims 20-27 by incorporating the TIMs in them as elements of the allegedly patentable combinations, the claim language itself does not support the constructions plaintiff seeks to impose on it. Specifically, the closing language of Claim 20 (element (C))-"only if the transaction is correct" is null language. It cannot import, as plaintiff now suggests, the whole set of error check subcircuits (described in Column 4, line 54 to Column 6, line 12, Column 9, line 57 to Column 10, line 54, Column 16, line 65 to Column 17, line 19, Column 17 lines 64 to 75, Column 18, lines 56 to 67), and it gains nothing from the license of the third paragraph of Section 112. The phrase indicates no means, and it states only a desideratum that is not the subject matter of the union of means of which the Claim is composed.

In conclusion, Findings 23 and 22 summarize the basic nature of the claimed subject matter here in issue in the light of the prior art and reflect the conscientious dis-

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1 - Tr. 1841, 2264-2269 (JAX 1184, 1245-1250)



charge of his responsibilities by the Court below:

23. The demands of a racetrack parimutuel system on data processing resources are modest: the arithmetic calculations required are rudimentary; the range of input data is narrow, and the data are simple and easily translated into binary terms; no elaborate long-term memory is requisite; programming is simple and direct, and much of it is reducible to permanent wiring of system components; pre-existing electromechanical circuitry readily supplies patterns which are in considerable part directly adaptable to solid state electronic data processing; the service demands on data processing systems of a racetrack parimutuel system present no identifiable difference of technical significance from those of other multiple input situations.

22. Electronic data processing is inherently many fold faster than electromechanical or mechanical or manual data processing; since transistors and other semi-conductors have become available, electronic data processing components have become extremely compact; no patentable novelty resides in the decision to convert to solid state electronic data processing from one of the slower and larger systems, and to adapt familiar functions and circuits to the use of electronic components is obvious; the economies of time, space, power consumption and related costs resulting from the substitution of electronic components of a data processing system for electromechanical or mechanical systems are attributes of solid state electronics broadly, and do not make obvious modes of using electronic devices in familiar systems patentably new and useful on the basis of the resulting achievement of the familiar economies common to all solid state data processing systems. (JAX 280-281).

C - Miscellaneous Activities Relating to the Preparation and Prosecution of the Application for the Patent in Suit.

1 - Preparation of the Patent Application

Plaintiff had the benefit of the services of the same



"experienced counsel" (Op. 215; JAX 253 ) throughout the entire period of concern. The desire to secure patent protection was a material consideration in the January 1961 Digitronics-Westbury agreement, which explicitly provided for the retention of all patent rights by Digitronics (Dx-AP, Par. 12; JAX 896 ). Concern over the invalidating statutory bar effect of the "sale and delivery" of the prototype pursuant to the January 1961 agreement, albeit allegedly on possible foreign patent protection, led plaintiff to try (unsuccessfully) to modify the terms of the January 1961 agreement by deletion of the "sell and deliver" terminology from Paragraph 2 thereof (Op. 29-30; JAX 67-68).

In early 1963, arrangements were made for an outside patent attorney, skilled in computer specification writing, to come in and draft the specification and claims covering the First Totalisator (Op. 56; JAX 94 ). Whether through inadvertence or design, such outside attorney was kept in a state of complete ignorance as to all antecedent events in the development chronology. With respect thereto, the Court specifically found (Op. 56; JAX 94) :

Mr. Spiezens was not told anything about the prototype, and he did not see it or any materials connected with it. He was not shown the brochure written around the prototype (Exhibit U), and he did not know of it.

and again at Op. 63; JAX 101:

Denied access to everything except the First Totalisator and to those persons named in the patent as patentees, the draftsman of the patent specification and claims had not the means to and did not disclose to the patent office examiner or refer in the patent application to the prototype or the published advertising brochure.

Such outside attorney however was not the attorney of record in the Patent Office. The "experienced attorney" who clearly had knowledge of at least some of the antecedent events was the attorney of record and he was aware of the nature and content of the application at the time of its filing (Tr. 2530-1; 3391-3). (JAX 1258-1259; 1322-1324)

2 - Information Withheld from the Patent Office

The Court summarized the nature of the information withheld from the Patent Office in Finding 45 (JAX 292 ) as follows:

45. Plaintiff did not advise the Patent Office of its developmental and attempted commercial exploitation activities relating to and based on the demonstrator prototype and its successful demonstrations that preceded the filing of the application for the patent in suit including:

- (a) the Leonard specification and the January 31, 1961 totalisator agreement, Exhibit AP;
- (b) the existence, demonstration and nature of the "demonstrator" - prototype electronic totalisator system; the contract of January 31, 1961 affecting it; and nature and extent of Shaw's and Kielsohn's work on the demonstrator;
- (c) the distribution of the Westbury "All Electronic Totalizator" brochure;
- (d) the contract for the sale of the "First Totalisator";

- (e) the nature of the electromechanical totalisator system and electronic adjuncts thereto as employed at the Roosevelt and Aqueduct tracks in 1961

### 3 - The Prosecution of the Application

The withholding of the material facts concerning plaintiff's own antecedent activities continued throughout the prosecution of the application through the Patent Office. Such was also characterized by a marked lack of candor as to the state of the art, inadequate if not misleading replies to the Examiner and a diversion of attention from the broad scope of coverage being sought in claims 20-27 (Op. 126 et seq.; JAX 164 et seq). The Court concluded its review of the prosecution by stating (Op. 136-37; JAX 174-175):

But it is difficult to escape the conclusion that in the present case the examination of the patent application was perfunctory, and the allowance of the claims necessarily of dilute, if of any, significance beyond that commanded by the statute. The applicants rested on merely differentiating what was cited to them. They never affirmatively identified their new, useful and unobvious advance over the prior art as distinguished from merely pointing out differences in detail between their device and those of the prior art. If anything, the prosecution, as far as it was carried, indicated that there could well be some patentable subject matter present without in the least relating that broad possibility to any of the particular inventions claimed in the 33 claims that were allowed, and, specifically, without relating that possibility to the claims here in direct controversy.



4 - The Unexplained Disappearance of the Prototype Drawings

Despite specific inquiries and production requests during pretrial discovery no evidence as to the specific nature of the prototype totalisator other than Ex. R<sup>1</sup> - (a list of formal engineering drawings of the prototype) - was ever forthcoming from plaintiffs. The absence of all such materials and their unexplained unavailability was and is highly questionable. The evidence here introduced as to the very existence and nature of the prototype totalisator was obtained by defendants from other sources.

With respect thereto, the Court stated (Op. 58-59; JAX 96-97):

It is all but impossible to understand how the prototype could have left so dim and uncertain an image after it. Mr. Weida was able to recall that when he took on the job of finishing the prototype, he got 15 to 20 pages of carbon-copy material respecting the operation of the logic and about 20 logic drawings (Tr. 1247-1249), and that he kept these papers for a year or two but cannot say where they went thereafter. There were at least circuit schematic drawings and structural working drawings of some sort, ... The drawings<sup>2</sup> available to him were in the drafting room files.

\* \* \*

The great difficulty was that the drawings for the prototype had completely disappeared, except for one irrelevant drawing, and disappeared without any satisfactory and reasonable explanation of their disappearance. A number of drawings related to Job. No. 4726 are listed in Exhibit R

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1 - JAX 866-870

2 - Tr. 1247-1249 (JAX 1150-1152)

but the evidence was that they were missing from the drawer in which they would have been stored. They were uniquely missing; the absence of the drawings reflected a discontinuity in the files.

As pointed out earlier, (supra pp. 14-15), Judge Dooling based his express finding as to the nature of the prototype on the ground that (F/F 39; JAX 287-288 ) " -- defendants are entitled to a finding based on the remaining evidence that: --" and further expressly found (F/F 43; JAX 291 ) that claims 20-22 squarely read on the prototype, based upon Weida's admissions.

In Finding 47 (JAX 293 ), Judge Dooling further found claims 23-27, as well as claims 20-22, invalid over the prototype because of plaintiff's unexplained failure to " -- make disclosure of the details of the device --". Here again, as reference to those portions of the opinion relating to the Westbury brochure (Op. 40-46; F/F 41-42; JAX 78-84; 289-290 ) and to the "presentation" made in conjunction with the prototype demonstrations (Op. 34-36; JAX 72-74 ) shows there was and is sufficient "remaining evidence" to support the finding.

ARGUMENT

I - IN ANSWER TO PLAINTIFF-APPELLANT

A - Introductory

Plaintiff-appellant's validity arguments (Pl.App.Br. 12-69) are a confusing and factually unsubstantiated melange of assertions, loosely categorized as two "primordial" errors and numerous "derivative" errors. These assertions, for the most part, never squarely face the grounds on which Judge Dooling determined the claims to be invalid. As will hereinafter become apparent, plaintiff-appellant ignores the facts found below and in their place, and in derogation of Rule 52(a) FRCP, poses an unreal factual world of essentially contrary character in conjunction with sarcastic attacks on Judge Dooling's ability to comprehend the subject matter involved and the purported bases for his conclusions.

B - As to the Lower Court's First Asserted Primordial Error (Pl.App.Br. 15-22)

The first "primordial" error is based upon the contention that Judge Dooling held the patent "invalid on its face" by his asserted failure to follow the "uniform procedure" to determine the issue of obviousness mandated by the Supreme Court in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966) (Pl.App.Br. 15).

Not surprisingly, however, plaintiff simply never quotes



such "uniform procedure" directly from the Graham decision itself but rather relies upon extracts and paraphrases thereof from other opinions which, by virtue of the context quoted, superficially appear to give great importance to the "secondary considerations" of non-obviousness under § 103 (cf. Pl.App.Br. 19). As a corollary thereto, plaintiff's gratuitously outline suggested criteria in a wholly self-serving and erroneous multi step "uniform procedure" at pp. 19-20 of their brief and, in subsection (g), elevate such "secondary considerations" (1) to (7) into a primary status.

Plaintiff-appellant's position is legally erroneous and without factual substance.

The "uniform procedure" mandated by Graham explicitly reads as follows (383 U.S. at 17):

While the ultimate question of patent validity is one of law, A. & P. Tea Co. v. Supermarket Corp., supra, at 155, the § 103 condition, which is but one of three conditions, each of which must be satisfied, lends itself to several basic factual inquiries. Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

The "secondary considerations" so stressed by plaintiff are clearly of only possible probative value and can only

be considered after the evaluation of the above primary determinants leaves the matter unresolved. With respect thereto Graham continues (p. 17-18):

Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy....

The subsidiary character and permitted reliance upon such "secondary considerations" only after the question of obviousness cannot be resolved by analysis and application of the primary criteria specified in Graham, is well recognized in this Circuit. See Formal Fashion, Inc. v. Braiman Bows, Inc., 369 F.2d 536, 539 (2d Cir. 1966); Continental Can Co. v. Old Dominion Box Co., 393 F.2d 321, 326 (2d Cir. 1968); Vanity Fair Mills, Inc. v. Olga Co., 510 F.2d 336 (2d Cir. 1975); Timely Products Corp. v. Stanley Arron, 523 F.2d 288, 294 (2d. Cir. 1975).

As evidenced by the foregoing lengthy statement of the operative facts found by the Court below, if there ever was a case in which the trier of the facts followed the "uniform procedure" mandated by Graham, i.e. exhaustively and thoroughly "determined" the scope and content of the prior art; "ascertained" the differences between the claims at

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issue and the prior art and resolved the level of ordinary skill in the pertinent art, this was it.

The Court's attention is specifically directed to the fact that Graham sanctions the possible use of the secondary considerations.

...to give light to the circumstances surrounding the origin of the subject matter sought to be patented...(383 U.S. at 17-18)

In the instant case, there is no doubt about "the circumstances surrounding the origin of the subject matter sought to be patented." As expressly found below, nothing more was here involved than the routine seeking of business by a qualified data processing "system" house followed by the routine application of then current state of the art data processing technology to the updating of an existing data processing system of known and defined functional character (F/F 36-38; JAX 286 ; supra pp. 10, 18) and which directly resulted in the admitted incorporation of the broadly claimed subject matter in a prototype routinely designed and constructed by corporate employees other than the named inventors of the patent in suit (supra pp. 10, 11, 16, 19-21).

Plaintiff's real complaint is that Judge Dooling did

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1 - Which of course necessitated ascertainment of the nature and scope of such claims.



his job too well with respect to analyzing and understanding the subject matter of Claims 20-27 in issue. Not only did the Court below pierce the bramble of unfamiliar and esoteric digital computer terminology employed in the patent specification, but he also cut through the disclosure complexities of the daily double capacity and the use of duplicated components and duplicate processing of critical signals - neither of which aspects were involved in Claims 20 through 27 (Op. 83; JAX 121 ) to ascertain the true nature and scope of the claims at issue as a necessary prerequisite to ascertaining the "differences" between such claims and the prior art. This was in direct accord with the "uniform procedure" mandate of the Graham case and the decision below is a monument of conscientious endeavor in this regard.

As a corollary to the erroneous characterization of the "uniform procedure" of the Graham case, plaintiff-appellant does the Court below an injustice by asserting that Judge Dooling's (Pl.App.Br. 21):

...brilliant technological achievement led him to the conclusion "on the face of the patent and in the light of the disclosures of its cited materials, that the claims in suit do not embrace any patentable discovery or invention..." ( A 220 M182). To put it simply, having fully understood the claimed inventions with the benefit of patentees' teachings, it was all obvious to him. (Emphasis plaintiff's)

and to thereby imply that his conclusions of invalidity, contrary to Graham, were attained without any awareness and consideration of the state of the art and solely by virtue of the hindsight gained by reading the disclosure of the patent in suit. Such erroneous contention is only arguably assertable because of the physical location of the particular quoted extract from a section (i.e. Section VII)<sup>1</sup> here the end of the opinion in which the Court proceeds to specifically measure the claims against the Handley patent and the 1961 NYRA totalisator. In so implying, plaintiff studiously ignores Judge Dooling's earlier prefatory remarks to the specific consideration of the nature and scope of the patented subject matter (Op. 68; JAX 106 ; supra pp. 23-24) i.e.:

Untangling the patent from the bramble of unfamiliar terminology is not very easy, but the 25 day trial illuminated the darker corners and, it is believed, made possible a reliably simple explanation of the teaching of the patent against the background of the prior art.

and which is directly contradictory to the inference plaintiff-appellant now advances. The foregoing operative facts clearly show that the Court was fully aware of and clearly understood the requisite nature and functions of parimutuel totalisators, the nature of the components of and the operationally inter-related functioning of such components in the electromechanical totalisators of the art, the nature of the components of and



the operationally interrelated functioning of such components in the electronic totalisators of the art of both the earlier vacuum tube type as well as the later solid state updates thereof. The Court was also fully aware of and understood basic digital data processing componentry and the operationally interrelated functioning thereof both in totalisators and in similar data processing equipment, as well as being fully aware of and clearly understanding the disclosure of the patent in suit. To contend, against this background of obtained knowledge of the prior art, that "...having fully understood the claimed inventions with the benefit of the patentees' teachings, it was all obvious to him --" does the Court a gross disservice and is contrary to fact.

The Court's reliance upon the general state of available knowledge as delineated by the prior art, including that specifically delineated by the specification of the patent in suit, is clearly demonstrated by the textual context of Finding 23 (JAX 281 ) (supra pp. 28, 39-40) and those introductory remarks in Section V as quoted earlier, supra pp. 28-30 , wherein he stated (Op. 140; JAX 178 ):

As the patent makes plain, the various devices used are all familiar ones. They involve very detailed circuitry painstakingly worked out, but there is no novel circuitry involved as is clear from the face of the patent and from the trial evidence.



Such awareness and specific consideration of the prior art, against which the nature and substance of the specific claims in issue were evaluated in Section VI<sup>1</sup> of the Opinion is entirely clear from the specific text thereof. Such section is replete with reference to the prior art, as for example evidenced by the following extracts relating to the claim 20 analysis and evaluation.

Each component is, as the specification makes plain, a familiar of the prior art (existing in various forms), and it performs its familiar role in a familiar way (Op. 142; JAX 180 ).

and

So here, the system of Claim 20 represents a linear linkage of known devices each performing in sequence its familiar task. No discovery of any novel union of such means is present, but only a functionally adequate union of means in which each means is used to do what its nature and previous use suggest. (Op. 147; JAX 185 ).

Plaintiff-appellant's basic problem is that the record here is replete with evidence of the state of the prior art and that, as evidence by Findings 22 and 23 (JAX 280-281) (supra pp. 28, 39-40) the Court was fully aware of its nature and content when it considered the nature and scope of the specification and claims here involved. As pointed out earlier plaintiff's dilemma, as revealed by this adversary proceeding and the state of the prior art, flows directly from the express

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1 - JAX 178-219

nature of the recited "means" plus function component identification terminology of claims 20-27. If literally construed the "means" plus function terminology reads squarely upon and does not differentiate, either as to the combinational structure or the functions performed thereby, over the prior art electromechanical totalisators such as Handley and the 1961 Aqueduct unit. If narrowly construed and restricted to the usage of "solid state" electronic components, they are likewise definitive of nothing patentably new or unobvious since state of the art conventionality was the cornerstone of the disclosure as evidenced by Digitronic's own development history (supra pp.9-12), the trial evidence (supra pp.21-40) as well as by the sole identification of suitable circuit components by reference to standard texts in the disclosure (supra 25-26). The nature of such dilemma was clearly posed by the Court's concluding comment as to Handley (Op. 199-200; JAX 237-238):

The detailed consideration of Handley demonstrates the overall absence of patentable novelty in the patent in suit. It brings out sharply the extent to which familiar circuits have long handled familiar tasks, and that the plaintiff's patentees brought no new discovery to the task but only a routine choice of familiar but newer means to replace the older ones of Handley in the same union of means. The union embraced in each claim Handley shows to be itself old, the asserted differences between Handley and the plaintiff's patent that plaintiff relies on, emphasizing differences in the means and not in the combinations or unions of means that, broadly, were equivalents, underline the want of novelty in the union of means -



the combinations, on the patentable novelty of which validity absolutely depends.

Plaintiff's assertion that Judge Dooling held that patent "invalid on its face" because of the hindsight gained through his "brilliant technological achievement" of fully understanding the claimed invention solely from the patentees teachings as embodied in the specification of the patent in suit not only is a disservice but is totally erroneous.

In view of the Court's meticulous and exhaustive compliance with the primary determinants of obviousness under § 103 as required by Graham, such "secondary considerations" are not of any probative value in this case. As a matter of more than passing interest however, it should be noted that plaintiff is not being entirely candid with respect to both the factual existence of such "secondary considerations" and the asserted lack of consideration given thereto by the Court below. For example, as to the existence of the repeatedly asserted "long felt want" and asserted "obsolete" character of the electromechanical totalisators, Judge Dooling expressly found to the contrary:

32. There was not a long-felt need for electronics to handle parimutuel betting at racetracks; it was evident at all times that introduction of electronic devices ought in theory to make possible savings in time, space, cost, and, perhaps, personnel at race-tracks as in other money handling establishments, and considerable work was done in designing and, to a certain limited extent in devising data processing



components and systems for parimutuel betting at racetracks; however, there was no want of practical, efficient and economically feasible electromechanical and mixed electromechanical and electronic installations in daily use at racetracks all over this and other countries for handling parimutuel betting. (JAX 284-285)

In a similar cavalier and specious manner, plaintiff exclusively and erroneously equates American Totalisator's failure to introduce an electronic solid state totalisator system with a purported continued inability to do so. Not only is such inferred inability specifically negated in Findings 35 and 23 (JAX 285; 281 ), but such overlooks the fact that Amtote was then receiving leasing fees of \$1,450,000 per year from NYRA (Pl.App.Br. 53) and about \$473,000 from Roosevelt (Op. 22; JAX 60 ), only 2 out of about 200 installations, and was in an effective monopoly position with a great inventory of the electromechanical units on hand (F/F 30-31; JAX 283-284 ). Under these circumstances, there was no real incentive for Amtote to do anything to change the situation. Plaintiff also dwells at length on the "daily double" problem and its purported solution. Such however, if such has any probative value whatsoever, relates to claims 31-33 which are not here in issue.

As to the asserted commercial success, there was clearly no immediacy of widespread utilization of electronic totes. The NYRA tote was routinely designed by another "system house"

and was installed and operated in 1965, well before the patent issued. Even as plaintiff would have it (Pl.App.Br. 9) some 5 years passed before the next unit was built. By 1974, some 10 years later, the electronic totes had only replaced less than 20% of the more than 200 Amtote installations (cf. F/F 30; JAX 283-284):<sup>1</sup>

Plaintiff-appellant's first "primordial" error is without merit either in law or in fact.

C - As to the Lower Court's Second Asserted Primordial Error (Pl.App.Br. 22-26)

The second asserted "primordial" error seeks to ex-  
clude the data processing field from the area of pertinent prior art and to thereby limit the latter to totalisators. Such proposition is based upon a blatant mischaracterization of the Dann v. Johnston decision and an ostrich like approach to the facts of this case.

First, plaintiff unqualifiedly asserts that (Pl.App. Br. 23) "In Johnston, supra, the pertinent art was the banking industry, not digital computer technology, and certainly

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1 - Even here such increased use is more attributable to the relatively low cost of the recent "minicomputers" (See, Pl.App.Br. 79).



not data processing generally." <sup>1</sup> This assertion is directly contrary to the holding in Dann v. Johnston, U.S. , 189 USPQ 257 (1976); in that the Court therein clearly found that, within the context of the subject matter of that case, both the narrower use of data processing systems within the banking field and the broader use of data processing systems in larger business organizations (Dirks) came within the area of pertinent art. This is entirely clear from the concluding extract of the decision which states (p.261):

In the context of the subject matter of the instant case, it can be assumed that such a hypothetical person would have been aware both of the nature of the extensive use of data processing systems in the banking industry and of the system encompassed in the Dirks patent. While computer technology is an exploding one, "[i]t is but an evenhanded application to require that those persons granted the benefit of a patent monopoly be charged with an awareness" of that technology. Id., at 19,...

The foregoing position was but a further and realistic application of policy enunciated in the referenced portion of the Graham decision, i.e. (383 U.S. 1, 19).

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1 - Plaintiff-appellant earlier asserted (Pl.App.Br. 13) - "In the subsequent Johnston case, the Supreme Court found the pertinent art to be the banking equipment industry and not the electronic digital computer technology."



Although we conclude here that the inquiry which the Patent Office and the courts must make as to patentability must be beamed with greater intensity on the requirements of § 103, it bears repeating that we find no change in the general strictness with which the overall text is to be applied. We have been urged to find in § 103 a relaxed standard, supposedly a congressional reaction to the "increased standard" applied by this Court in its decisions over the last 20 or 30 years. The standard has remained invariable in this Court. Technology, however, has advanced - and with remarkable rapidity in the last 50 years. Moreover, the ambit of applicable art in given fields of science has widened by disciplines unheard of a half century ago. It is but an evenhanded application to require that those persons granted the benefit of a patent monopoly be charged with an awareness of these changed conditions. The same is true of the less technical, but still useful arts. He who seeks to build a better mousetrap today has a long path to tread before reaching the Patent Office.

Whether by inadvertance or design, we must note that the quoted excerpts from Dann v. Johnston at p. 23 of appellant's brief fails to indicate the omissions of considerable intervening material, which serve to greatly clarify the true import of the holding.

In the "context of the subject matter" of this case it has been specifically found a) that parimutuel totalisators, of any type, are data processing systems (F/F 14; JAX 277-278; supra p. 21 ); b) that -- "The patent was granted as a patent on a data processing system in Class 340-172.5; it was a patent

of a company which evidently worked exclusively in the electronic data processing field, and the patentees were men and women working in that field, and, in the years here in question, very naturally working in the newest branch of it, the solid state electronic data processing arts, invoking the use of transistors and other semiconductors" (Op. 3; JAX 41; See, F/F 23, 36-38; JAX 281; 286 )and that the subject matter in question was the direct result of an experienced data processing system house seeking a job that was no more than the upgrading of a simple and then well defined existing data processing system (F/F 36-38, 23; JAX 286; 281 ). Moreover, the specific text of the patent in suit is explicitly in direct accord therewith (supra pp. 21-40 ).

To contend other than, that "the relevant field for inquiry is data processing, of which racetrack parimutuel totalizators are instances" (Op. 182; JAX 220 ) is to adopt an ostrich like approach that is not only completely devoid of reality but which is in complete derogation of Rule 52 (a) FRCP.

The pertinent art, as found below, correctly includes the data processing field and the totalisator field as a recognized part thereof and the former, both as a matter of law and fact, cannot be excluded as plaintiff seeks.



D - As To The Asserted "Derivative" Errors (Pl.App.Br. 26-69)

At the conclusion of the argument on the second asserted "primordial" error, plaintiff-appellant asserts that five specific derivative errors flowed from Judge Dooling's refusal to limit the pertinent art to the "totalisator business" (Pl.App.Br. 25-6). Such derivative errors will be separately considered with the two relating to the prototype being taken up last.

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|---------------------------|--|
| 1 - Derivative Error No.1 | D. Finding the Patent Obvious on its Face as "ABC Data Processing solely on Hindsight Gained from the Patent (Pl.App.Br. 26-29). |
|---------------------------|--|

This is no more than a repeat of plaintiff's mischaracterization of the action taken by Judge Dooling and advanced as a part of the first asserted "primordial" error. Here, however, plaintiff goes, further and boldly states (Pl.App.Br. 27) - "But only after the wisdom of hindsight... gained only from the teachings of the patent disclosure" and -- "Judge Dooling's obviousness inquiry effectively began and ended with what Digitronics had done".

Such assertion was rebutted at length above (supra pp.46-57) and all that need be further here noted is that "what Digitronics had done" - precedent to the development of the First Tote - such as the various engineering specifications, the design and construction of the prototype totalisator and the Westbury brochure were all the work of people other than the patentees and formed a part of the relevant prior art.



The "ABC data processing" cliché seized upon and indiscriminately employed by plaintiff as applicable to the entire patent is a good example of its usage of out of context extracts from the opinion. As stated in the opinion, the text reads (Op.175;JAX 213):

Claim 21 identifies the components of the aggregator centering on the memory MEMA and it represents ABC data processing. "Memories" have to be thus and thus implemented; the very term implies addressed positions for "words," retrieval of them for arithmetical calculations, and return of them to the addressed position.

Such subject matter relates to magnetic core memory utilization. Judge Dooling, in the opening portion of his opinion relating to data processing techniques (supra pp.30-33), specifically described the then conventional nature of such core memory construction and mode of operation as explained by the testimony of the expert witnesses (see Highleyman, e.g. Tr. 2681-2699, 2752-2773) (JAX 1260-1278; 1281-1303).

Not only was such context of "ABC data processing" a narrow and accurate one, but its very basis of use by Judge Dooling cogently demonstrates the specious and somewhat desperate nature of plaintiff's derisory statement at page 27 of its brief:

In a nutshell, "ABC data processing" is the conclusion of the technologically brilliant Judge Dooling. But only after the wisdom of hindsight decried by the Supreme Court in Graham and gained only from the teachings of the patent disclosure. He finds the claims invalid on their face without remotely considering...

Plaintiff's first derivative error is meritless.

2 - Derivative Error No. 2 E. The Fosse Examination  
(Pl.App.Br. 29-32)

This was a putative "straw man" that plaintiff attempted to set up during trial. Plaintiff's objective was to examine Fosse on the Amtote patents introduced in evidence as a man of "ordinary skill" (Pl.App.Br. 29) but one not possessed of enough skill (?) to be an inventor (Pl.App.Br. 31-32).

Apart from the lack of merit in the second "primordial" error base for plaintiff's contentions, a reading of the entire referenced transcript pages 2139-53<sup>1</sup> (whole pages having been omitted from the quoted extracts) shows that Fosse was neither particularly well qualified nor representative for the stated purpose of showing Amtote's level of skill in totalisator art and that the exclusion of such line of the testimony was not error.

3 - Derivative Error No.5      I(4) - The Concluding Clause of  
Claim 20 (Pl.App.Br.26, 57)

The language in question appears at the end of claim 20 i.e. "transmitting an acknowledgement signal --- only if the transaction is correct." The scope of this language was specifically considered and disposed of as a matter of fact by the Court below (supra p. 39 ). Plaintiff does nothing but to repeat its contention and presents nothing to demonstrate any error below.

1 - JAX 1219-1233



The remaining two "derivative" errors relate to the prototype totalisator. While it is difficult to understand how such relate to the second asserted "primordial" error, they will be separately considered.

- 4 - Derivative Error No.3      G. Prototype Not Prior Invention  
and Thus Not Prior Art etc.  
(Pl.App.Br. 39-44)

Plaintiff here attempts to render the demonstrator-prototype a legal nullity and thus remove it as an element of relevant prior art. Apart from the erroneous deprecatory characterization of the unit as a "feasibility" prototype in contradistinction to that of a "Demonstrator" as characterized by the Court below (cf F/F 39,40,43,45; JAX 287-289, 291, 292) plaintiff studiously avoids reference to Finding 49(JAX 293-294 ) which states, *inter alia*:

The conception of the demonstrator-prototype was not shared by Weida, and its reduction to practice in the successful demonstrator-prototype was completed without any creative contribution on Weida's part.

Judge Dooling did not hold the prototype to be a "prior invention" as posited by plaintiff and the entire subject of priority of conception and reduction to practice as such might arise under § 102 (g) is immaterial. Judge Dooling did find that



such prototype was "--Inevitably...prior art of other inventors against the patent in suit"-- (Op.63;JAX 101 ) and constituted "critical prior art" (Memo Op. Of Jan 13, 1976;JAX298-300).

Section 102 states:

A person shall be entitled to patent unless -

(a) the invention was known or used by others in this country...before the invention thereof by the applicant for patent, or

and

(f) he did not himself invent the subject matter sought to be patented, or

Insofar as the broad subject matter of the claims here in issue is concerned, such prototype, as expressly found below (supra pp.16,19-21) was a) the work of individuals other than the named patentees b) precedent to any connection any such patentees had with the totalisator subject matter and c) was "known" and "used" by others, including the patentee Weida, long before any work on the First Tote was started (supra pp 20-21): No amount of legal obfuscation through the erroneous equating of out of context utilization of "commercially incompetent" with illusory requirements as to the nature of, and need for, a "reduction to practice", can nullify the controlling facts found below as to the known nature, use and anticipatory invalidating character of such demonstrator-prototype and its consideration as part of the relevant prior art.

In the instant case, the demonstrations of the prototype clearly verified that the subject matter of broad claims 20-27 was operable and commercially marketable. As such it clearly constituted a reduction to practice under the recently enunciated requirement (2) of the Timely Products case, as cited by plaintiff (cf 523 F.2d 288 at 302).

The remainder of plaintiff's argument of this point is no more than a recitation of factually unsupported assertions relating to priority of conception and reduction to practice of the First Totalisator subject matter, subjects here of complete immateriality from both a factual and legal standpoint.

5 - Derivative Error No. 4 H. Joinders of the "Initial Designers" of the Prototype as Inventors (Pl.App.Br. 44-48)

In direct contradiction to Finding 43 (JAX 291 ;supra p.16), plaintiff opens its argument by stating -- "Although no claimed invention was completely conceived...in the feasibility prototype..."-- and then indulges in an exercise of circular reasoning to avoid the critical fact that

None of the named inventors of the patent in suit made any conceptual contribution to any of the electronic totalisator subject matter incorporated in the "Demonstrator" electronic totalisator system. -- (F/F 40; JAX 288-289 ,supra pp. 16,20-21).



Improper inventorship under § 102 (f), supra p. 65, is a total and incurable defect. While § 256 of the 1952 statute (35 USC) ameliorated some of the harsh consequences of the earlier law as to partial misjoinder or nonjoinder (see Kennedy v. Hazelton, 128 US 667 (1888)) it did not change the basic tenet that patents can only be granted to the true inventors, and does not sanction the requested action in situation such as here presented.

In Koehring Co. v. E.D. Etnyre & Co., 254 F.Supp. 334, 149 U.S.P.Q. 263 (N.D. Ill. 1966), the application had been filed by an individual who was not the inventor. In holding the patent void, the Court concluded and held (254 F. Supp. at 359-60; 149 U.S.P.Q. at 284):

A person who did not actually invent the subject matter sought to be patented is not entitled to a patent, 35 U.S.C. § 102.

A patent which is issued to a person who did not invent the subject matter sought to be patented or to his assignee is unauthorized by law and is void, conferring no rights against the public. Kennedy v. Hazelton, 128 U.S. 667, 9 S.Ct. 202, 32 L.Ed. 576 (1888); City of Milwaukee v. Activated Sludge, 69 F. 2d 577 (7 Cir. 1934).

\* \* \*

Koehring is unable to avail itself of the corrective provisions of the statute relating to the omission of co-inventor, inasmuch as the court has found that Harold Lund was the sole and actual inventor of the subject matter of the patent in suit and Gene P. Flaherty, the alleged inventor, has no claim to inventorship whatsoever.



So also in Rival Manufacturing Co. v. Dazey Products Co., 358 F.Supp. 91, 177 U.S.P.Q. 432 (W.D. Mo.1973) where the Court concluded and held (358 F.Supp. at 101, 177 U.S.P.Q. at 439-40):

Title 35, U.S. Code, Section 256, is limited to the correction of errors involving true joint inventorship and does not contemplate or permit what would amount to substitution of one inventor entity for another under the guise of "correction", which would occur with respect to Claim 2 and other of the removable arm claims if plaintiff's Application were to be granted. Koehring Company v. Etnyre & Company, 254 F.Supp. 334 (N.D.Ill. 1966).

Plaintiff's cases do not reach or involve the critical factual situation here present. Such is tacitly recognized by plaintiff by attempting to clothe Weida with some inventive contribution to the prototype (P.App.Br. 48). Such contentions are meritless and the findings below are to the contrary (F/F 40, 49; JAX 288-289, 293-294, supra pp.16,20-21). Here present is a total absence of conceptual contribution by the named inventors to the subject matter covered by the very claims in issue. Such is a fatal defect under § 102 (f) and is not curable by § 256.

E - As to the Missing Evidence Relating to the Demonstrator Prototype (Pl.App.Br. 32-39)

Plaintiff's litany of unsubstantiated speculative excuses, unfounded and totally false implication that defendant has or ever had the so-called set of Roosevelt drawings, alliteration of purported material structural and operational differences, and recitation of its post trial search efforts, only serve to emphasize a)

the total lack of effort made to locate such type of documentary evidence in response to specific production requests made early in the discovery period and b) the singular unavailability of not only the prototype drawings (both original tracings and all copies thereof) from the engineering and company files as well as all other evidentiary materials such as logic operation description and logic drawings, that were in existence at one time (supra pp.44-45).

Despite the singular unavailability of any type of documentary evidence as to the nature and existence of the prototype in plaintiff's files, defendant was able to amass a considerable amount of evidence with respect thereto from other sources. In so doing, defendant did carry its burden of proof as evidenced by Finding 39 (JAX 287-288) which opens by stating:

39. Exactly what was comprised in the Demonstrator or prototype is not certainly ascertainable and plaintiff is responsible for that circumstance. In the absence of plaintiff's production of the evidence that must of necessity have been in its possession and which it has failed to produce defendants are entitled to a finding based on the remaining evidence that:...

and there followed a recitation of major component elements. Included therein was specific recognition of the fact that "3 regular (ticket dispensing) ticket issuing machines" were used with the prototype. Two of these were the so-called Hohmann machines dwelt upon by the plaintiff in its recitation of immaterial differences unrelated to the claimed subject matter at issue (Pl.App.Br. 35) but the third was a standard Bell Punch machine of conventional character



(Weida 1750, 1754-55; JAX 1179, 1182-1183) having all of the necessary features such as "rejection signal responsive means for unlatched switches" and the like.

Moreover, the Court should not lose sight of the fact that the Westbury brochure (supra pp. 16-17) was written around the prototype and illustrates the specific components thereof. The specific nature thereof as found by the Court at Op.40-46 (JAX 78-84 ) clearly shows the close relationship between the prototype and all the claims in issue. So also, the 1961 presentation for the Italian group (DxCU; JAX 970-980 ) provides further information as to the basic nature and mode of operation of the demonstrator-prototype (supra p. 15). The Court below did no more than to accept, under the circumstances stated, the evidence of record presented by defendant and deem it sufficient to anticipate all of the claims in issue.

Plaintiff advances three reasons why the Court's action complained of was purportedly unjust (Pl.App.Br.36). As to the "First" reason, defendants have never had a set of the missing drawings or any of the "details" referred to in their possession. As to the "Second", defendants did rely on the evidence that they located and adduced during pre-trial discovery. As to the "Third", defendants did bear their burden of proof despite the difficulties presented by the singular and still unexplained disappearance of the formal engineering construction drawings and the logic drawings and write-ups, including the originals and all copies, from plaintiff's own files.



There was no error below.

F - As to Plaintiff's Point I - Concluding Section on Validity (Pl.App.Br. 49-69)

This lengthy concluding section on validity is entitled "How the Novel Claimed Inventions Solved the Prior Art Race-track Totalisator Problems and Satisfied the Long-Felt Need for Economically Automated Daily Double Betting" - This is truly an amazing title in view of the fact that -

- a) The "novel claimed inventions" were found to be incorporated in the demonstrator (supra pp. 12-16)
- b) The Court below specifically found there was no long felt need (supra pp. 55-56); and
- c) The daily double problem and any purported solution thereto relates to claims not in issue (supra pp. 21-22)

In this catch-all section, involving nine separate subsections, plaintiff attempts to reargue all of the factual issues that were resolved against it in the trial court, apparently on the bootstrap assumption that all asserted errors have now been resolved in accord with its desires and it is time to have this Court retry the case on its merits; that Rule 52 (a) does not exist; and that semantics can take the place of reality.

Since most of the assumptions on which plaintiff's fanciful arguments are based have been previously discussed, only some limited specific comment here is deemed appropriate.

(1) - Heart of the First Tote (Pl.App.Br. 49-52)

Plaintiff here equates, entirely without benefit of

record support, whatever Mr. Lease meant by the esoteric terminology "differential sequence access to the same memory for computational procedure" in a letter with the claim 20(B) subject matter; boldly asserts that such "had never been done before" in complete derogation of the admitted anticipation thereof by the prototype-demonstrator; and gratuitously includes a whole host of alleged functional and operational relationships into the broadly stated means terminology. Plaintiff then argues backward from partial out of context comments of the Court as to Handley and the 1961 Aqueduct totalisator, to find the presence of novel subject matter in claims 20-22, in complete derogation of the admitted item for item identity and anticipatory character of the demonstrator-prototype with respect thereto. Also ignored is the fact that such subject matter including the use of core memory units is disclosed in the Westbury brochure (supra pp.16-17).

Plaintiff's preoccupation with semantic differences likewise ignores the structural and operational realities between such claims and the prior art electromechanical totalisators as expressly found below (supra pp. 21-40).

(2) - Daily Double Economically Automated by Claims  
20-22 (Pl.App.Br. 52-55)

This is no more than a shallow and specious attempt to equate the so-called daily double problem and solution with



claims 20-22 rather than with the non-elected and admittedly non-infringed daily double claims 31-33.

(3) - Additional Advantages of The Claims 20-22  
Invention (Pl.App.Br. 55)

Entirely apart from reliability which was based upon the use of duplexed components as embodied in non-elected and admittedly non-infringed claims 1-19, the remaining advantages were, as expressly found below, no more than the recognized advantages of the electronic upgrading of any data processing system (F/F 22, JAX 280 ;supra pp. 39-40).

(4) - How Judge Dooling Invalidated Claims 20-22 in  
Their Face (Pl.App.Br. 56-58)

This is no more than a further reassertion of the erroneous mischaracterization of the acts of the Court below that were treated earlier in this reply (supra pp.46-57 ).

(5) - All Electronic Means (Pl.App.Br. 58-61)

This section again mischaracterizes the action taken by the Court below and further is in complete derogation of the explicit broader and contrary teaching of the patent specification. Plaintiff's difficulties lie with the nature of the patent specification disclosure and not with the action of the Court below (supra pp.21-40).

(6) - Synergistic Results (Pl.App.Br. 61-63)

This specious exercise in semantics was specifically considered and rejected by the Court below as a matter of fact



(supra pp 38, see pp.28-40). As Judge Dooling noted -- "A special ingenuity of indirection would be required to do it any other way." (Op. 180; JAX 218 , supra p.38 ).

(7)/(8) - High Speed Scanning, Scratched Horse Sub System - Claims 23-27 (Pl.App.Br. 63-68)

This is no more than a reassertion of matters decided adversely to plaintiff below as a matter of fact (supra pp 34-36).

(9) - Handley is Inoperative (Pl.App.Br. 68-69)

Despite early recognition of the critical importance of the Handley patent as a prior art reference, this is the first specific treatment of Handley in the brief. The assertions are no more than blatant misstatements based upon a partial and out of context extract from the Court's opinion. The Court actually stated (Op. 197; JAX 235):

The acknowledgement circuitry of Handley is not assured against certain conceivable errors, but it is straightforward acknowledgement means operable in the generality of instances, and it fully responds to claim element 23(E).

With respect to Handley, the Court specifically found at the introduction to Section VII of the Opinion (Op. 182-83; JAX 220-221) :

The prodigious detail involved in discussing the totalizers of the prior art gives them a specious appearance of difficulty and complexity. They are indeed detailed as they must be, but straightforward. The block diagram, Exhibit BL, generalizes the parimutuel data processor in terms of a sequence starting with the wager placed at a TIM

and proceeding through pickup of the wager data in a scanner stage, validating and testing it in a processor stage, aggregating the wagers in the first phase of a transaction calculation stage, performing calculations on the data in the odds, etc. calculator, and displaying the result. Feedbacks from the processing and aggregating stages are shown - a "reject" feedback for erroneous transactions from the processing stage and an "acknowledgement" feedback from the aggregator stage, signifying that the wager has been recorded and a betting ticket will be released.<sup>1</sup>

This was followed by a detailed description of the Handley disclosure (Op. 183-193; JAX 221-231 ) followed by a detailed consideration of each claim (Op. 193-200; JAX 231-238 ) in which all the claims were found to "read upon" Handley or to differ therefrom in inconsequential particulars (see supra p. 32-37).

Plaintiff's assertions as to Handley are just a further indication of the shallow and specious nature of their contentions. Handley was in no way inoperative.

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1 - DxBL (JAX 944)



G - As to Non Infringement (Pl.App.Br. 70-83)

Plaintiff-appellant's lengthy argument is more a plea to the country concerning the subject of "patentability" in the software programmed digital computer field than it is an attempted demonstration of error in the holding below.

The issue presented is a narrow one. Simply stated, it is whether an apparatus claim for a combination of old elements (as distinguished from a "process" claim) can be infringed where such recited "elements" in the accused software programmed general purpose computer -

- exist only in sequenced transitory states through the interaction of sequentially operative software "program" instructions with elements of available standardized and multifunctional circuitry, and
- do not coexist as physically identifiable entities at any given instant of time.

The facts do not appear to be in dispute. Claims 20-27 are apparatus claims reciting a combination of elements and, as admitted by plaintiff-appellant at page 72 of its brief -

In effect, the general-purpose computer is a "storehouse of parts" and the stored program creates "instant hardware" by sequentially connecting the computer parts into a new combination -- i.e., a new machine.

The defendants' position, which was adopted by the Court below, and the authority in support thereof is adequately



set forth at pages 209-10 of the Opinion. (JAX 247-248). Basically it is that, as a matter of law and fact, an apparatus claim for a combination of elements cannot be infringed unless the accused elements are coexistent as physically identifiable entities at any given instant of time. As succinctly stated in Expanded Metal Co. v. Bradford, 214 U.S. 366 (1909) at 384:

A process is a mode of treatment of certain materials to produce a given result. It is an act, or a series of acts, performed upon the subject matter to be transformed and reduced to a different state or thing. If new and useful, it is just as patentable as is a piece of machinery. In the language of the patent law, it is an art. The machinery pointed out as suitable to perform the process may or may not be new or patentable; whilst the process itself may be altogether new, and produce an entirely new result. The process requires that certain things should be done with certain substances, and in a certain order; but the tools to be used in doing this may be of secondary consequence.

This clear and succinct statement of the rule was recognized and applied (Mr. Justice Bradley again speaking for the court) in the case of Tilghman v. Proctor, 102 U.S. 707. In the course of the opinion the learned justice tersely says:

"A machine is a thing. A process is an act, or a mode of acting. The one is visible to the eye - an object of perpetual observation. The other is a conception of the mind, seen only by its effects when being executed or performed. Either may be the means of producing a useful result."

Plaintiff-appellant's arguments never reach the basic issue, as will be apparent from the following.

Contrary to plaintiff's assertions (Pl.App.Br. 70),

Judge Dooling clearly adopted defendants' position and found confirmatory support therefor in Gottschalk v. Benson, 409 US 63 (1972) (Op. 212; JAX 250 ) as evidenced by his careful use of the word permanent as distinguished from sequenced or transitory as is admittedly characteristic of the operation of the software programmed general purpose computer. Likewise, plaintiff's recognition of the sequenced and transitory nature of the software programmed computer (supra pp. 76-77) shows no error in "technological fact" as contended in the opening section of the argument.

Plaintiff's contentions as to permanence in section (1) (p. 72) of its brief not only misconstrues Judge Dooling's use of the term permanent, but also begs the basic issue. Permanence in the sense of being able to repeat a sequence of operations to momentarily create transitory functioning components from a "storehouse of parts", is not relevant to the issue here presented. Likewise, whether a software programmed general purpose computer is a "new" machine as asserted in subsection (2), is immaterial. This point, as the cited cases indicate, relates to patentability rather than the narrow infringement question here in issue.

Neither Dann v. Johnston nor any of the other Patent Office cases cited by plaintiff reach the infringement point here in issue. The Decca case does not appear to have involved



sequenced transitory existence of component elements as a factor in the resolution of the infringement issue.

The "equal protection" section of plaintiff's argument (Br. 75-6) is also wide of the basic issue. First, defendant does not deny that method or process claims could readily be infringed by the operation of a software programmed general purpose computer. Likewise plaintiff's assertions relating to its "transmitter-receiver" example i.e. -- "Surely, that is an infringement even though the patented transmitter system is only duplicated temporarily",<sup>1</sup> assumes that the "patented transmitter" physically exists as a complete entity at a given instant of time. Such is not the case here and it is the admitted lack of physical coexistence at any given instant of time that is the crucial point of distinction.

Likewise the "equivalence" argument (Br. 77-8) also begs the question. Performance of the functions required in a sequential manner does not result in the required physical coexistence of the entities performing such functions.

As to the remaining contentions (Br. 79-83), the Johnston case expressly did not decide the question of "general patentability of computer programs" even as presented by the "system" claims there involved cf. 189 USPQ 257, 258. How such a case could therefore be "undermined" by the decision below is difficult to comprehend. Likewise in concluding, his comments

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1 - Pl.App.Br. 76 Emphasis plaintiff's.



Judge Dooling did no more than recognize, and properly so, that the sequenced operation of a software programmed general purpose computer lies in the realm of process claims. Plaintiff's assertions in the concluding section of its brief again beg the question since the scanner is only one element of one of the claims and it and all of the other component elements of the general purpose computer are operatively sequenced and controlled by the program.

In closing, it should be again noted that plaintiff advances nothing by way of controlling fact or law that is in any way demonstrative of error below.

V        Conclusion

Plaintiff's questions must be answered in the negative. The Court below is not in error and the decision as to invalidity and non-infringement must be affirmed.

## II. ARGUMENT ON THE CROSS APPEAL

1. Did the District Court Err in Failing to Find the Case to be "Exceptional" Because of the Withholding of Material Facts Relating to Plaintiff's Invalidating Antecedent Activities from the Patent Office?

The standard of ethical conduct required of applicants in the solicitation of patents is well defined.

The Court of Customs and Patent Appeals in Norton v. Curtiss, 433 F.2d 779, 167 U.S.P.Q. 532 (C.C.P.A. 1970) stated and held at 793-94:

Nevertheless, we do subscribe to the recognition of a relationship of trust between the Patent Office and those wishing to avail themselves of the governmental grants which that agency has been given authority to issue. The ex parte prosecution and examination of a patent application must not be considered as an adversary proceeding and should not be limited to the standards required in inter partes proceedings. ... Clearly, it must rely on applicants for many of the facts upon which its decisions are based. The highest standards of honesty and candor on the part of applicants in presenting such facts to the office are thus necessary elements in a working patent system. We would go so far as to say they are essential.

Available remedies and the type of conduct required were outlined in Monolith Portland Midwest Co. v. Kaiser Aluminum & Chemical Corp., 407 F.2d 288, 294, 160 U.S.P.Q. 577, 581 (9th Cir. 1969) wherein the Court stated:



A patent applicant's breach of duty to the Patent Office is relevant in determining not only the validity of his patent, but also his good faith in maintaining a subsequent infringement action. An applicant's fraud on the Patent Office is enough standing alone to convert his later infringement action into an exceptional case within the meaning of section 285. But conduct short of fraud and in excess of simple negligence is also an adequate foundation for deciding that a patent action is exceptional<sup>1</sup>. Such conduct is a serious breach of the patentee's duty to the Patent Office. The party who succeeds in invalidating the unlawful patent performs a valuable public service. It is appropriate under such circumstances to reward the prevailing party by giving him attorney's fees for his efforts, and it is equally appropriate to penalize in the same measure the patentee who obtained the patent by his wrongdoing. ...

The Monolith case and the standards set forth therein were quoted with approval and applied in Kahn v. Dynamics Corporation of America, 508 F.2d 939, 184 U.S.P.Q. 260 (2d Cir. 1974).

This Court's recent decision in Timely Products Corp.<sup>1</sup> v. Stanley Arron, 523 F.2d 288 (2d Cir. 1975) (subsequent to the decision below) has clarified the controlling law and establishes that wilful or conscious bad faith is not a necessary prerequisite to a determination that a case is exceptional. That case not only identified certain paramount considerations as being determinative but also involved a factual situation closely akin to, but falling far short of, that here presented.

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1 - 187 U.S.P.Q. 257



The probative facts there involved were (p.298):

Arron concealed from the Patent Office not only the fact that Costanzo was the person who had cooperated in his work prior to Costanzo's filing date; he concealed the even more important facts that the sock disclosed and claimed in Costanzo's patent had been conceived, reduced to practice and even offered for sale before he (Arron) started work on his alleged improvement, and that he knew all about the Costanzo sock and used it as the point of departure for his work. Thus he was well aware that, even though he might be able to swear back of Costanzo's filing date, he could not antedate Costanzo's invention. Costanzo's work was clearly part of the prior art from which Arron's alleged advance should have been measured. Armour & Co. v. Swift & Co., 466 F.2d 767, 769-71 (7th Cir. 1972). By concealing his knowledge of Costanzo's sock, Arron caused the Patent Office to appraise his contribution from the reference point of an earlier state of the art, and thus erroneously to credit him with Costanzo's advance as well as his own.

\* \* \*

We thus conclude not only that the Arron '264 patent is unenforceable on the ground of unclean hands, as the District Court ruled, but also that it is invalid on the ground of fraud, as the District Court stopped short of ruling.

A striking parallel exists between the facts found herein and the considerations recognized as controlling in Timely Products. The Court here found that the "demonstrator-prototype" (cf. Costanzo's "sock") to be relevant prior art (supra pp.12-16) that it was repeatedly and successfully demonstrated more than a year before the Weida et al application was filed (Op. 64; JAX 102 ; supra p. 13 ) and that it expressly embodied the subject matter of dominating claims 20-22

of the Weida et al patent (supra pp. 14-16 ), and further that such was clearly known to Weida and others associated with plaintiff's patent application. (supra pp. 19-21). The Court below also expressly found that none of these relevant facts were disclosed to the Patent Office (F/F 45; JAX 292; supra pp. 42-43 ).

The information here withheld goes much further than that deemed sufficient in Timely. As evidenced by Finding 45 (JAX 292 ; supra pp.42-43), the subject matter genesis in the engineering specification, the existence of the Westbury brochure and the nature of the 1961 Aqueduct tote system were also withheld. These matters were all of critical import with respect to the "reference point" from which the Patent Office would appraise the claims. Of equally serious import was the filing of the application in the names of individuals who had no conceptual connection whatsoever with the broad subject matter here in suit. Such erroneous inventorship was recognized as sufficient for an "exceptional" case declaration in Kramer Enterprises v. Duralite Co., 185 U.S.P.Q. 641 (2d Cir. 1975).

Judge Dooling was apparently of the view that proofs approximating those needed for common law fraud or "reckless neglect" were required. He stated (Op. 213-15; JAX 251-253 ):



But the evidence does not support a finding that there was conscious wrongdoing or witting non-disclosure of what plaintiff knew or should have known was germane to the prosecution of the application. ... There was a chilling disregard of the principle that it is individual human inventorship only that the patent law recognizes and not corporate ownership of technical talent. ... The conscious misdealing with the Patent Office or the reckless neglect of disclosure responsibilities required by the authorities were not present. ...

It is, therefore, concluded that the patent was not obtained through any fraud on the patent office, and, that, although plaintiff's management of the prosecution was characterized by a foolish unconcern, a want of proper managerial and technical supervision, and an improperly broad delegation of responsibility to an inadequately instructed patent solicitor, plaintiff did not act in bad faith in prosecuting the patent as it did, or consciously breach its duty to the patent office.

As is now apparent, the controlling law as recently enunciated in Timely does not require proofs of the type deemed necessary by Judge Dooling.

Within the above context, the abortive attempt to amend the 1961 agreement to delete the sell and deliver provisions therefrom (supra pp.12-13,18) was clearly related to and indicative of both an awareness of and concern for the invalidating anticipatory effect thereof on patent validity (Op. 29-30, 60-61; JAX 67-68, 98-99 ). Such concern and the subsequent withholding of the foregoing identified information from the Patent Office is particularly reprehensible in view of the fact that the



accused NYRA unit was installed well prior to the issuance of the patent. Infringement litigation, such as here instituted, was thus more than a remote possibility for considerable period of time prior to patent issuance and the pursuit of dominating claims such as here in issue, must be viewed in such light. Further, compounding the situation is the still unexplained singular disappearance of the prototype drawings and other documentary evidence of both its existence and nature from plaintiff's files.

In the case at bar plaintiff was early appraised of the noninfringing character of the NYRA installation insofar as claims 1-19 and 28-33 were concerned as well as the asserted anticipatory character of the Handley patent as to the remaining claim, in the availing effort to resolve the controversy.

Thereafter, discovery recommenced and eventually resulted in the ascertainment of the facts relating to the history of the Digitronics-Roosevelt-Westbury relationship and to the anticipatory existence of the prototype and brochure. Thus, even if one were to concede, arguendo, that some justification may have existed for the initial filing of this action, serious questions arise, in view of plaintiff's confessions of noninfringement at the start of trial, as to its continuance on a broad base through discovery and certainly as to the propriety of the continuance of this suit through the twenty-five day trial and subsequent extensive briefing.

Viewed in any light, plaintiff's conduct fell far short of the "highest standards of...candor" required of applicants for patent and such failings as are here involved far exceed those delineated by controlling authority as justifying a holding that the case is exceptional. Equity and justice dictate that, as between the plaintiff and defendants herein,

- defendants have performed a valuable public service at great cost in both time and expense over the last eight years in invalidating this unlawful patent;
- plaintiff's obtaining and enforcing of its patent under the circumstances should not be sanctioned;
- defendants should have the opportunity to recoup its attorney's fees through a declaration that the case is exceptional.

In accord with the foregoing, defendant submits that, under the now controlling authority of the Timely case, the case should be declared "exceptional" so as to permit consideration of a discretionary but appropriate award of attorney's fees to defendants by the trial court to both deter patentees from engaging in the kind of conduct here established both before the Patent Office and the Court and to recompense the defendants for the time and effort over the years spent in protecting the public interest in the course of acting in its own self interest through the invalidation of this improperly secured patent.



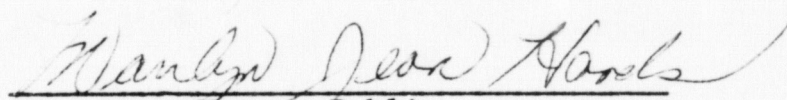
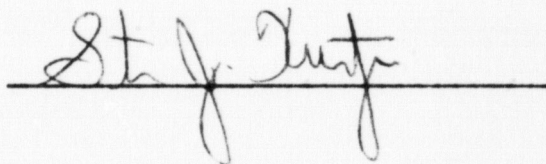
The question presented by the cross appeal should be answered in the affirmation and the case remanded for consideration of an award of attorney's fees to defendants.



STATE OF NEW YORK )  
 : ss.  
COUNTY OF NEW YORK )

STEVEN J. KURTZER being duly sworn, deposes and says: deponent is not a part to the action, is over 18 years of age and resides at 208 West 23 Street, New York, New York. On September 16, 1976 deponent served by hand delivery, two copies of the attached ANSWER BRIEF OF DEFENDANTS APPELLEES and MAIN BRIEF OF DEFENDANTS-CROSS APPELLANT upon S. C. Yuter, attorney for plaintiff in this action, at 605 Third Avenue New York, New York the address designated by said attorney for that purpose.

Subscribed and sworn to before me  
this 16th day of September, 1976.

  
Notary Public

MARILYN JEAN HANDS  
Notary Public, State of New York  
No. 03-4503750  
Qualified in Bronx County  
Comm. Expires March 30, 1977